



# CSE MAGAZINE 2022

Volume 01



**Computer Science and Engineering (CSE) Magazine**  
Military Institute of Science and Technology  
Dhaka, Bangladesh



**Computer Science and Engineering (CSE) Magazine**  
**Military Institute of Science and Technology**  
**Dhaka, Bangladesh**



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## MESSAGE FROM CHIEF PATRON

Bismillahir Rahmanir Raheem. MIST is the most vibrant military academic institution, where the tranquil campus echoes with dedicated instructors, staff, and talented students come alive. In just two decades, MIST has grown into one of Bangladesh's leading engineering institutes, dedicated to advancing the country's technological dominance. In order to achieve its mission of excellence in the fields of science, engineering, and technology, this Institute has prioritized quality teaching, research, and innovation. The department of Computer Science and Engineering, as one of our most vigilant departments, worked tirelessly to achieve MIST's goals. In keeping with the purpose, the CSE department has made a step further by publishing the department's face as a CSE Magazine 2022, Vol 01.

This magazine- as I have learned- is published to mark the footprint of the glorified journey of the CSE department. Warmest felicitation to the editorial board for their tireless endeavor to make the publication a success. I hope that our current students and alumni shall find this magazine informative and inspiring, and be proud of their Alma mater.

A handwritten signature in black ink, appearing to read 'Wahid-Uz-Zaman'.

**Major General Md Wahid-Uz-Zaman**, BSP, ndc, aowc, psc, te  
Commandant  
Military Institute of Science and Technology



## MESSAGE FROM EDITOR IN CHIEF

Military Institute of Science and Technology (MIST), the pioneer technical institute of Armed Forces, started its journey on 19 April 1998. The Department of Computer Science and Engineering (CSE) is one of the pioneer departments of this institute providing top-quality education in CSE in its undergraduate program. It was established in the academic session 2000-2001 as CSIT. To emerge as a center of excellence in education and research in the field of CSE, this department is imparting quality education, creating new knowledge, and producing skilled human resources capable of solving, prevailing and emerging problems in CSE and allied domains in order to contribute towards the advancement of human society meeting the ethical, economic, environmental and social norms. In this data-driven era, data analytics and cyber security are two revolutionary approaches concerning this factor, and our department is successfully targeting and approaching these revolutionary ways along with the world.

I'm ecstatic that we've published the first edition of the CSE MAGAZINE 2022, Vol 01. This magazine's major goal is to introduce the CSE department's face to everyone within and around MIST. It features a variety of spectacular events and activities, as well as national and worldwide achievements by students and staff members, along with noteworthy accomplished projects. The CSE department at MIST is proud to announce that it is the only engineering department in Bangladesh to have established a Cyber Range for safeguarding and training in the cyber realm. This magazine also highlights our active research group, alumni members who have achieved high positions in reputable industries both at home and abroad, and current research publications by our exceptional faculty members in top-ranked conferences and journals.

I'd like to thank the Chief Patron for his immense support and commend all members of the editorial board for their valiant efforts in bringing the departmental magazine to fruition.

A handwritten signature in black ink, appearing to be 'Md Razzak', written in a cursive style.

**Brigadier General Md Abdur Razzak, SUP, psc**  
Head, Department of CSE  
Military Institute of Science and Technology



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## Department of CSE at a Glance



*Opening ceremony of CSE program- 2000*

The Department of Computer Science & Engineering (CSE) was established as part of MIST during the academic session 2000-2001 as CSIT. Having started with a modest amount of resources and facilities that offered an undergraduate BSc program only to the military students, the department has evolved into one of the largest and most successful ones at MIST. Now, in addition to a BSc program at the undergraduate level for military and civil students, the department of CSE also offers MSc, MEngg, and Ph.D. programs at the postgraduate level.



*State-of-the-art classroom facilities of the department of CSE*

The department of CSE boasts highly qualified faculties, along with a state-of-the-art learning infrastructure that provides an ideal platform for students to hone their skills in the field of the computer sciences. The department provides an ideal environment for the student to specialize in the contemporary fields of Computer Science including Artificial Intelligence, Robotics, Machine Learning, Data Analytics, and Network & Cyber Security to name a few. It also collaborates with both the industry and government departments and agencies, thereby establishing a symbiotic leadership for both stakeholders which is especially beneficial for students.

The Department of CSE draws its strength from the experienced pool of highly professional faculties. The department is headed by the Head of the department and consists of experienced faculties which translates to a 1:8 teacher-to-student ratio. The faculties are drawn in from diverse nationalities, prior



## CENTRE OF EXCELLENCE



*A group of proficient and skilled faculty members of the CSE department*

professional exposure (military, industry, academia), and diverse educational qualifications and backgrounds, thus providing large areas of expertise from which the students can benefit. Based on requirements, domain specialists are brought in from other well-renowned educational institutes.

The Department of CSE provides a conducive learning environment for the students in the form of state-of-the-art classrooms and well-equipped laboratories. While the classrooms provide an opportunity to learn the technical aspects of the subject, the laboratories provide an opportunity for the students to have a “hands-on” experience with technology and thus innovate. The air-conditioned classrooms with high-speed internet, projection systems, and document readers are an ideal place for collaborative learning. In addition to the existing 9 laboratories which include an AI lab, PG research lab, and Networking lab, the Advanced Computing and Cyber Security lab is established and is funded by the ICT Division of Bangladesh. Moreover, three new labs are set to open in the near future: the Software Testing and Quality Control lab, the Digital Forensic Lab, and the Innovation Lab.

To support the learning facilities in the department, a Department Library has also been established in addition to the MIST Central library and holds over 800 books and close to 300 theses of



*The department library houses fundamental computer science and engineering books and thesis dissertations of students*

ex-students. The books in the library are procured based on the recommendations of faculty members and students and are primarily available to assist the students in their research work. The library is well-used by the students and serves as a hub for the research work and project activities undertaken by the department. The library provides the students taking different courses with an ideal platform to exchange ideas and collaborate.





# MISSION

To provide comprehensive education and conduct research in diverse disciplines of science, engineering, technology, and engineering management.

To develop technologically advanced intellectual leaders and professionals with strong moral and ethical values in order to address the socio-economic demands of Bangladesh as well as the world.

To conduct collaborative and research activities with national and international communities for continuous interaction with academia and industry.

To provide consultancy, advisory, and testing services to government, industrial, educational, and other organizations by rendering technical support for widening practical knowledge and contributing to sustainable socio-economic development.



## Active Faculty Members



**Brig Gen Md Abdur Razzak, SUP, psc**  
Head of the Department



**Dr. Md. Mahbubur Rahman**  
Professor



**Col Ashraful Rahat Siddique, BGBMS**  
Senior Instructor



**Md. Abdus Sattar**  
Associate Professor



**Lt. Col. Kazi Israt Zahan, psc**  
Instructor Class-A



**Lt Col Muhammad Nazrul Islam, PhD**  
Associate Professor



**Maj Md Mokhlesur Rahman**  
Instructor Class-B



**Major Md Mahbubar Rahman**  
Instructor Class-C



**Dr. MD Akhtaruzzaman**  
Assistant Professor



**Dr. Nusrat Sharmin**  
Assistant Professor



## Active Faculty Members



**Sharifa Rania Mahmud**  
Assistant Professor



**Nuzhat Tabassum**  
Assistant Professor



**Tasmiah Tamzid Anannya**  
Lecturer



**Sqn. Ldr. Zohirul Islam**  
Instructor Class B



**Rubyeat Islam**  
Lecturer



**Zinia Sultana**  
Lecturer



**Iyolita Islam**  
Lecturer



**Raiyan Rahman**  
Lecturer



**Muhaimin Bin Munir**  
Lecturer



**Swapnil Biswas**  
Lecturer



**Nafiz Imtiaz Khan**  
Lecturer



**Sumaiya Nuha Mustafina**  
Lecturer



## Active Faculty Members



**Shahriar Rahman Khan**  
Lecturer



**Md. Mustaqim Abrar**  
Lecturer



**Md Shadman Aadeeb**  
Lecturer



**M. M. Rushadul Mannan**  
Lecturer



**Tasneem Mubashshira**  
Lecturer



**Tasfia Tasnim**  
Lecture



# PRIME ENTITY OF THE DEPARTMENT



## Mongol Barota

Following the Apollo flights, NASA and other groups have desired to conquer Mars. On the other hand, space engineers and scientists have recently focused their attention on Mars. A Mars rover is a vehicle that is designed to move on Mars' surface, explore the surrounding terrain, be directed to fascinating objects, position itself in sunny areas to be warm during the winter, and learn more about how to manage robotic vehicles from afar. In order to encourage engineering students to acquire skills and discover their inner genius in robotics, the Mars Society organizes the University Rover Challenge (URC) every year, which motivates university students to design and build a rover that would be beneficial to early Mars explorers. The University Rover Challenge (URC) is the world's leading robotics competition held annually in the desert of Southern Utah, USA. The competition challenges student teams to design and build the next generation of Mars Rovers that will one day work alongside astronauts exploring the Red Planet.



*A team named "Mongol Barota" from the CSE department attended "University Rover Challenge (URC)- 2014" and secured 12th position out of 31 teams*

In 2013, MIST began its conquest of URC, with a team titled Mongol Barota – a team with the goal of attaining new heights with one objective: to represent their institute as well as their country on a prestigious global platform with pride. Since then, the team has been developing and raising cutting-edge, innovative Mars rovers to compete against other teams from around the world.

With little resources and a small workforce, team Mongol Barota worked on their first rover for a whole year in 2013 in order to compete in the University Rover Challenge (URC) in 2014, marking the first time any team from Bangladesh had entered this prestigious worldwide challenge. Even in this first effort, the team achieved a respectable 12th position in the world, making history and laying the groundwork for the trip ahead.

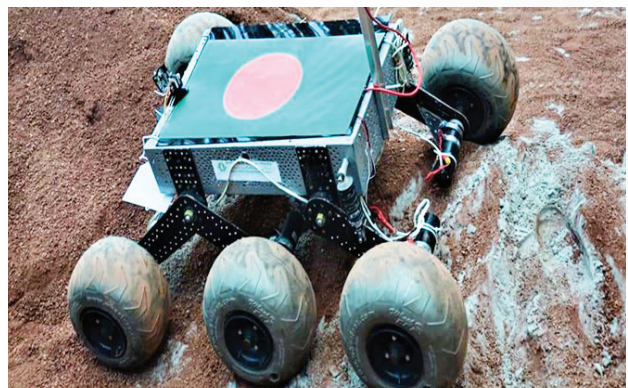
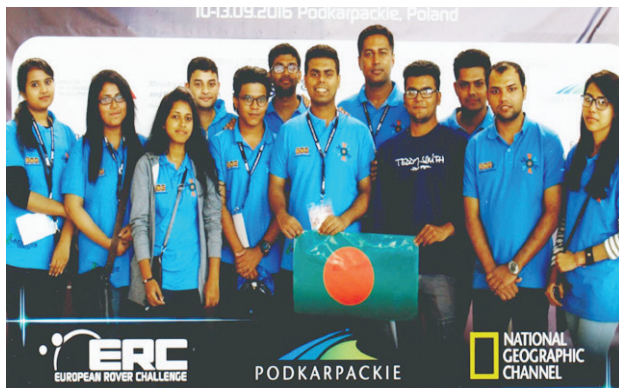
Following its surprise success in 2014, the squad continued its journey in URC 2015. The team's performance had substantially improved as a result of a more structured team and better design, as seen by the team's achievement of a global 9<sup>th</sup> position.





*Students from the Department of CSE participated in the “European Rover Challenge-2016” an international Robotic competition arranged by European Space Foundation in Poland.*

2016 marked Mongol Barota’s maiden attempt in the European Rover Challenge (ERC). The crew had given it their all, with big ambitions and a strong desire to succeed. However, the team was not successful in their attempt, and as a result, remained on pause for the next few years. Part of the trip was overcoming adversity and grieving a loss, which the team felt deeply after the challenge ended.



*Students from the Department of CSE participated in the “European Rover Challenge-2016” an international Robotic competition arranged by the European Space Foundation in Poland.*

Team Mongol Barota rose from the ashes with a new rover, appropriately named "PHOENIX", after a long sabbatical. Due to the pandemic, the on-site finals of URC were canceled in 2021 and the hosts came up with an alternative virtual challenge. It provided participants with the opportunity to build obstacle courses on their own campuses, and compete remotely while judges and fans tuned in online. The competition included three missions and 13 teams from 5 countries



*The students participated with the rover "Phoenix" in University Rover Challenge 2021 and became Global Champion*

were able to compete in the finals where all the sessions were live-streamed. In URC 2021, the top 36 teams out of 88 could compete in the final round. MIST Mongol Barota participated in this prestigious competition and secured the GLOBAL CHAMPIONSHIP. They scored the highest in 'Equipment Servicing Mission' and attained the second-highest score in 'Extreme Retrieval and Delivery Mission'. This was the first time in the history of the team, the institute, and the country. The efficient communication between the CSE and ME departments was the key to

this success, making the team stronger than ever. The team MIST Mongol Barota, comprising 17 students (9 from the CSE department and 8 from the ME department) led by Captain Akib Zaman (student of the CSE department), and supervised by Colonel Mohammad Shahjahan Majib and Professor Dr. Md Mahbubur Rahman from the CSE department, MIST, outperformed all the other teams from the USA, Europe, and other continents.

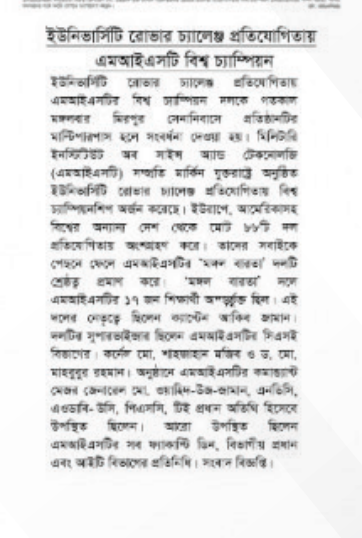
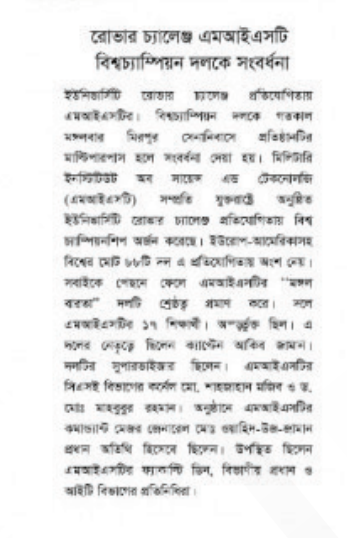


*The Mongol Barota Team with respected commandant after winning the Global Championship in URC 2021*

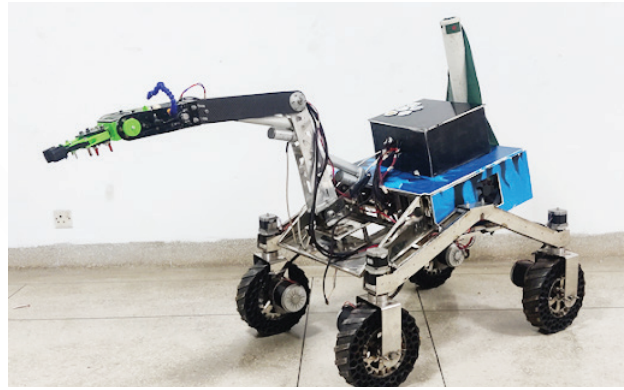
The crew has matured and evolved into something spectacular throughout the years. As the builder of future engineers, MIST prioritizes collaboration, learning, and teamwork throughout each project in order to transform the initial concept into reality. Now, with the slogan "Nothing is constant except change," MIST continues to evolve in order to meet the challenges we face.



# MIST UNIVERSITY ROVER CHALLENGE GLOBAL CHAMPIONSHIP



Media coverage of MIST university rover challenge global championship



*MIST Mongol Barota developed the brand new rover “PHOENIX 2.0” to participate in the University Rover Challenge 2022 (URC) and Anatolian Rover Challenge 2022 (ARC)*

## URC '22

Following its stellar success in the 2021 University Rover Challenge, Mongol Barota, led by Shafayetul Islam, a student of CSE Level-4, tackled the competition in 2022 with a more potent arsenal, with the rover PHOENIX 2.0 as its centerpiece. The remarkable streak of the former year continued as the team qualified as a finalist after the first stage of the competition, the System Acceptance Review (SAR). For its second time in a row, with the highest SAR score of 92.85 out of 100 among all other universities in the country, the team became one of the 36 finalists among a record 99 teams competing this year.

## ARC '22

For the first time in 2022, the Space Exploration Society (UKET) is organizing the Anatolian Rover Challenge on the premises of İstanbul Technical University between the 22nd and 25th of July. Owing to its list of successful participation in different competitions throughout the years, Mongol Barota was handpicked and invited to take part in the challenge. The ARC offers a unique life-like space experience with a storyline of voyaging through Mars, the Moon, and the Earth.

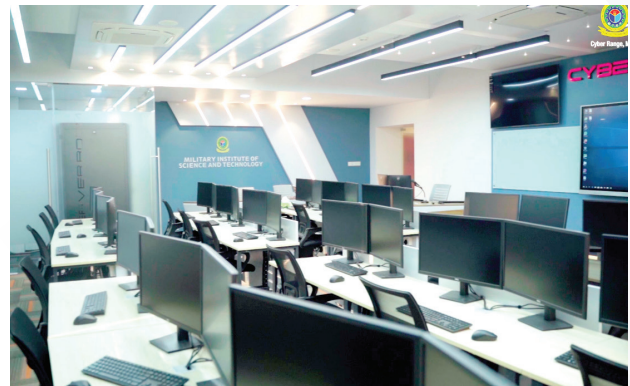


## Cyber Range



*The entrance to the MIST Cyber Range*

In this day and age, we are more connected than ever through the internet. Bangladesh, no doubt, is now significantly linked through digital services, but without proper security measures, the more connected we are, the more vulnerable we are in cyberspace. Globally, damages caused by cyber-attacks cost companies 25 crores per minute. Data from around the world reveals that the number of cyberattacks is drastically growing year after year, and data from Bangladesh suggests that we too witness large cyberattacks on an annual basis. Not to mention, here at home, many more attacks go undetected and unreported. Prime attacks like the Yahoo Data Breach, Sony Pictures Hack, and closest to our home, the Bangladesh Bank heist certainly signifies how damaging cyber attacks can be.



*The Cyber Range facility houses modern devices, equipment, and technology from Cyberbit, Singapore.*

In Bangladesh, as we break milestones in providing digital services online, it is now more important than ever that our personnel are trained in cyber security. The Department of CSE, MIST is proud to host and run the world-class MIST Cyber Range which is a state-of-the-art facility, sponsored by the ICT Division, housing modern devices, equipment, and technology from Cyberbit, Singapore. It simulates networks, traffic, and attack scenarios, to train and test people, procedures, and technologies in a safe and real-life network environment. The range enables trainees to get hands-on training, handle numerous cyberattack scenarios, and defend against cyber threats in real-time. Trainees will learn to handle Denial of Service attacks on business-critical components, SQL injection, Domain Hijacking, Website Hacking, Web Defacement, Spear-phishing, Ransomware, Trojan Malware, Data Leakage, Eavesdropping, Watering-Hole Attacks, Brute Force Attacks, Man-in-the-Middle Attacks, Living off the Land Attack, ARP Spoofing Attacks, and so on. Apart from learning about attacks, the trainees will also conduct Intrusion Detection (IDS), Malware, Log & suspicious network traffic analysis, Vulnerability Scanning Analysis, Security Information & Event Management (SIEM) exercises, and other exercises using the SCADA network. MIST Cyber Range is offering professional training programs for practitioners, decision-makers, and also beginners on network, server, and data security for the government, business, banking, IT, and security forces.



*The Honorable ICT State Minister, the respected Commandant, and the Head of the Department are on stage at the inauguration ceremony of Cyber Range*

**The State Minister for ICT, Zunaid Ahmed Palak** inaugurated the lab on 10th April 2022. "The lab is the first of its kind in the history of the country's educational institutions, which has been set up under the supervision of the ICT Division. I hope the lab will bring a new dimension to the cyber security sector", the Minister said, addressing the event as the chief guest. With the Commandant of MIST, Major General Md. Wahid-Uz-Zaman, BSP, ndc, aowc, psc, te as the chief patron, cyber security officials of the armed forces, and office bearers of the Bangladesh Computer Council, were present at the event. The program was organized by the Department of CSE under the supervision of the Head of the Department, Brigadier General Md Abdur Razzak, SUP, psc.





*The Honorable ICT State Minister inaugurating MIST Cyber Range*

The activities of the range will be conducted by our experienced internal faculty members as well as external coaches. The range will be dedicated to teaching, training, and nurturing the future defenders of our cyberspace which will include both the students of MIST as well as external cyber security practitioners. Our cyber range will be providing training, education, and certification for the members of the armed forces, IT Professionals, members of law enforcement agencies, as well as private and public organizations. Furthermore, it will be able to provide advisory and consultancy services to different military, government, and private organizations.

The Department of CSE, MIST is determined to continue bolstering its own efforts even further towards developing the cyber range. With immense support from our government and our determination, this cyber range will doubtlessly be able to play a strong role in protecting and preserving our beloved Digital Bangladesh. MIST is committed to developing human resources in the field of Cyber Security and serves as a center of security professionals who are best prepared to protect against any cyber threats. Let us all make cyberspace secure in Bangladesh.



*Cyber attack demonstration at the cyber range in presence of the honorable ICT State Minister and distinguished guests*

# INAUGURATION CEREMONY OF MIST CYBER RANGE

10 APRIL 2022



## এমআইএসটিতে সাইবার রেঞ্জ ল্যাব উদ্বোধন

ঢাকার মিরপুর সেনানিবাসের মিলিটারি ইনস্টিটিউট অব সাইন্স অ্যান্ড টেকনোলজিতে (এমআইএসটি) 'সাইবার রেঞ্জ ল্যাব' উদ্বোধন করা হয়েছে। আইসিটি প্রতিমন্ত্রী জুনায়েদ আহমেদ পদক রোববার প্রধান অতিথি হিসাবে এটির উদ্বোধন করেন। এ সময় তিনি তথ্য ও যোগাযোগ প্রযুক্তির উন্নয়নে বাংলাদেশ সরকারের গৃহীত বিভিন্ন পদক্ষেপের কথা উল্লেখ করেন।

## Bangladesh Post

'Bangladesh wants to lead the world in cyber tools and cyber solutions'

State Minister for Information and Communication Technology (ICT) Zamaud Ahmed Palak poses for a photo with the cyber security experts and high officials of the Military Institute of Science and Technology (MIST) on Sunday.

"We digital Bangladesh has been implemented and for next few years we will continue cyber security has been established in the country. We want to lead the world in cyber tools and cyber solutions. Bangladesh wants to lead the world in cyber tools and cyber solutions by 2041, and State Minister for Information and Communication Technology (ICT) Zamaud Ahmed Palak said.

## জৈনিক

এমআইএসটিতে সাইবার রেঞ্জ ল্যাব উদ্বোধন

ঢাকার মিরপুর সেনানিবাসের মিলিটারি ইনস্টিটিউট অব সাইন্স অ্যান্ড টেকনোলজিতে (এমআইএসটি) 'সাইবার রেঞ্জ ল্যাব' উদ্বোধন করা হয়েছে। আইসিটি প্রতিমন্ত্রী জুনায়েদ আহমেদ পদক রোববার প্রধান অতিথি হিসাবে এটির উদ্বোধন করেন। এ সময় তিনি তথ্য ও যোগাযোগ প্রযুক্তির উন্নয়নে বাংলাদেশ সরকারের গৃহীত বিভিন্ন পদক্ষেপের কথা উল্লেখ করেন।

## ভোরের ডাক

এমআইএসটিতে সাইবার রেঞ্জ ল্যাব উদ্বোধন

ঢাকার মিরপুর সেনানিবাসের মিলিটারি ইনস্টিটিউট অব সাইন্স অ্যান্ড টেকনোলজিতে (এমআইএসটি) 'সাইবার রেঞ্জ ল্যাব' উদ্বোধন করা হয়েছে। আইসিটি প্রতিমন্ত্রী জুনায়েদ আহমেদ পদক রোববার প্রধান অতিথি হিসাবে এটির উদ্বোধন করেন। এ সময় তিনি তথ্য ও যোগাযোগ প্রযুক্তির উন্নয়নে বাংলাদেশ সরকারের গৃহীত বিভিন্ন পদক্ষেপের কথা উল্লেখ করেন।

## এমআইএসটিতে সাইবার রেঞ্জ ল্যাব উদ্বোধন

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## ডেবের ডাক

এমআইএসটিতে সাইবার রেঞ্জ ল্যাব উদ্বোধন

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## দেশ রূপান্তর

এমআইএসটিতে সাইবার রেঞ্জ ল্যাব স্থাপিত

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## বনিবাবাত্রা

Govt working to develop cyber solutions Says Palak

State Minister for Information and Communication Technology (ICT) Zamaud Ahmed Palak said on Sunday the government is working sincerely in flourishing cyber tools and solutions in the country, reports BSS.

"Bangladesh does not want to be a recipient country in developing cyber tools and cyber solutions. By working jointly with the government-academia and industry, Bangladesh is working to lead the world in cyber tools and cyber solutions by 2041," he said.

The minister was speaking as the chief guest at the inaugural function of the country's first Cyber Range Lab' aimed at enhancing cyber security capabilities under the ICT Division's 'Secure Email and Digital Literacy Center Establishment' project at the Military Institute of Science and Technology (MIST) in the city.

He said, the ICT Division has enhanced manpower in four domains Security, Artificial Intelligence, Robotics and Secure Processing Design under the directives of the Prime Minister's ICT Adviser.

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## daily sun

MIST gets Cyber Range Lab

A Cyber Range Lab has been set up at MIST to enhance cyber security capabilities under the project titled 'Establishment of Secure E-mail and Digital Literacy Centre for the Government of Bangladesh' implemented by Bangladesh Computer Council (BCC).

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Media coverage of inauguration ceremony of MIST Cyber Range



**EVENTS AND  
ACTIVITIES:  
2021-2022**

# MIST Inter-University ICT Innovation Fest 2021: Mongol Barota



*MIST Inter-University ICT Innovation Fest 2021 was hosted online to celebrate the glorious Golden Jubilee of Independence of Bangladesh*

To celebrate the glorious golden jubilee of the Independence of Bangladesh, the CSE department of MIST arranged the “MIST Inter-University ICT Innovation Fest” during September-October 2021, with the objective of providing a platform for young and brilliant minds from around the nation to showcase their innovative ideas, initiatives, and prototypes that employ ICT to tackle the challenges that our country faces today. The fest included four categories of contests – Hackathon, Project Showcasing, Mobile App Contest, and Essay Competition. Hackathon, Project Showcasing, and the Mobile App competitions were open to university students, while the essay competition was held for college students.



*MIST Inter-University ICT Innovation Fest 2021 launching ceremony*



## Hackathon

The hackathon was divided into three specific challenges:

Challenge 1: For the Nation,

Challenge 2: For the Society

Challenge 3: For Education.

Short-listed teams in each challenge were invited for a final 72-hour online hackathon. Based on the review by the panel after the hackathon, the top three teams in each challenge were awarded prize money of BDT 20,000, 15,000 and 10,000 as the first, second and third prizes respectively for each challenge.

## Project Showcasing:

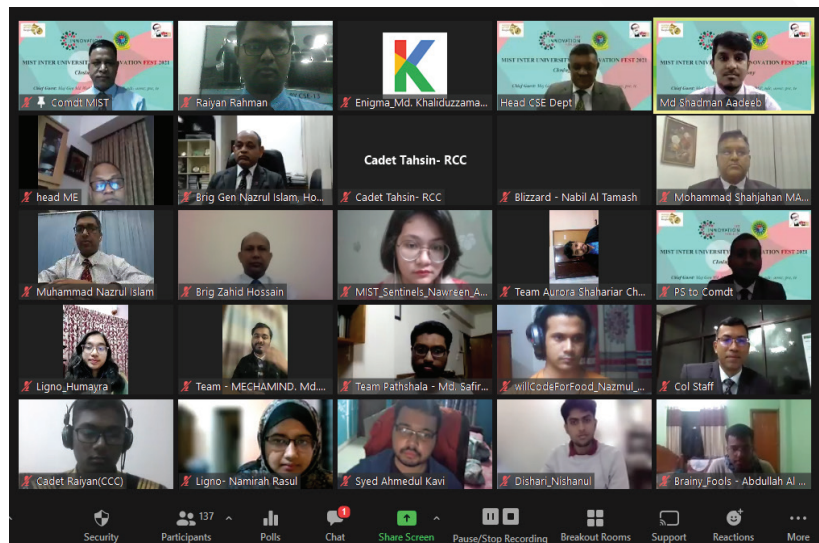
Any relevant and innovative project that evolved during the pandemic in the fields of information technology, science, and engineering was considered for the project showcasing criteria. The project could be based on software, hardware, or a combination of both. Five prizes were given for the Project Showcasing segment- First prize: 20,000 BDT, Second prize: 18,000 BDT, Third prize: 15,000 BDT, Fourth prize: 12,000 BDT, and Fifth prize: 10,000 BDT.

## Mobile App

The Mobile App Contest portion of the festival allowed students to enter the competition, amazing everyone with their coding skills and creativity. The android apps for this challenge focused on three primary categories: (a) Education under COVID-19, (b) Bangabandhu and Bangladesh's 50th anniversary, and (c) Humanitarian Services under COVID-19. 3 prizes from each category, i.e., a total of 9 prizes were given for the contest, where the prize money for each category was as follows: First prize: 15,000 BDT, Second prize: 12,000 BDT, and Third prize: 10,000 BDT.

## Essay Competition

This segment of the fest focused particularly on the college students of Bangladesh. Students wrote essays on the theme "Achieving Self-Dependence in Information Technology - My Vision for Bangladesh," which had an 800-word restriction. A total of 5 prizes were given in this category- First prize: 10,000 BDT, Second prize: 8,000 BDT, Third prize: 7,000 BDT, Fourth prize: 6,000 BDT, and Fifth prize: 5,000 BDT.



*Closing ceremony of MIST Inter-University  
ICT Innovation Fest 2021*

Students from several universities and colleges around the nation took part in this fest, including BUET, MIST, IUT, SUST, KUET, BRACU, NSU, and DIU. A total of 157 submissions were accumulated by 387

participants from 29 universities and 15 colleges. Cumulative prize money of BDT 3,38,000 was distributed among the winners of different contests.

## Training on CompTIA A+

A training course, training on computer hardware and basic network CompTIA A+, was arranged in MIST to create skilled and confident manpower for monitoring, administering, and maintaining computers and networks. The training was conducted from 28 October 2021 to 16 November 2021, under the supervision of the CSE department. A total of 74 military officers participated in this training, including all military student officers (except Level-4) of the CSE department and signals officers of other departments. Certificates were distributed among the participants after the successful completion of the training program.



*Respected Head of the Department with the participants of the CompTIA A+ Course*

# Programming Contest

## Independence Day Programming Contest 2022



*Independence Day Programming Contest 2022 for the students of level 1 organized by MCC*

With the aim of introducing young, passionate programmers to the concept of team contests, MIST Computer Club (MCC) organized an onsite 'Independence Day Programming Contest 2022' for Level-1 MIST students. The well-anticipated event was held at the Multimedia and Graphics Lab with active participation from enthusiastic 3-member teams. The problems were set by the highly experienced current and ex-members of MCC. The 3 hours 30 minutes long brainstorming

session was conducted on the Codeforces Gym platform. MIST\_Decoders, an intellectual team from Level 1 of the CSE department secured the 1st position from a bunch of talented participants. Prizes will be arranged for the top teams at a later convenient date. MIST has set an example to upskill its well-prepared and competent teams for the near future.

## Junior Programming Contest 2022

On its 2nd inaugural ceremony, the talent hunt program arranged a junior-level programming contest for the Level-2 students of the Department of CSE, MIST. The problem setters of the onsite individual contest were the current members of the MIST Computer Club. The contest was arranged to prepare the participants for the upcoming ICPC while also enhancing their competitive programming skills. The winner was Zarif Zeisan Mustafa, an enthusiastic student from CSE-21. The 1st and 2nd runner-ups were Zarif Zeisan Mustafa and Abrar Mahir Ehsam, both from CSE-21 as well.

## Talent Hunt Programming Contest 2021

The Department of CSE, along with MIST Computer Club, successfully arranged the programming contest as part of the Talent Hunt 2021 in two phases. It was inaugurated on 20th December with the Senior Level which was for the students of Levels 2 and 3 and was concluded on 22nd December with the Junior Level which was for the students of Level-1. The whole event was conducted in the presence of senior students and teachers. Before the commencement of the contest, the Head of the CSE Department paid a visit to the event site and appreciated both the participants and the organizers. The contest ended in success owing to everyone's combined efforts.





*Exciting moment of programming contests*



*Organizing committee of Talent Hunt Programming Contest 2021*

## **ICPC Preliminary and Dhaka Regional 2021**

Amidst the country-wide COVID-19 emergency, MIST managed to arrange the online preliminary session for the interested participants of the global competitive programming event ICPC. The participants were grouped into teams consisting of 3 members each hailing from Levels 2, 3, and 4 of the Computer Science and Engineering department of MIST. The online event and registration procedures were coordinated by the coaches in association with the MIST Computer Club. MIST was then able to secure a slot for the online ICPC Asia Dhaka regional by delivering a stellar performance in the preliminary round. MIST\_NashInmate, a team consisting of Rayhan Ferdous Faisal from CSE-20, A S M Rakibul Hasan from CSE-19, and Mahedi Kamal Avash from CSE-19, was selected for the Dhaka Regional round. The team was coached by former student and Lecturer, Swapnil Biswas from the Department of CSE, MIST. They have received immense support from the MIST authority for their hard work, dedication, and determination.

## **Talent Hunt**



*Enthusiastic participation of students at CSE Talent Hunt*





*Prize Giving Ceremony of Talent Hunt 2021*

The Talent Hunt program was launched with an aim to gather the students of Levels 1 and 2 of the department of CSE, providing them with a platform to showcase their hidden talents. Organized for the first time on 04 December 2021, the event consisted of several exciting segments and which garnered active participation from the students. This year, the segments of the cultural competition were held in the MPH (Multipurpose Hall) with an invigorating attendance from the student body and the cooperation of the faculties and staff. The event included a wide range of extra-curricular activities such as singing, dancing, debate, painting, etc. There are 7 segments in the event including - solo song, solo dance, poem recitation, traditional art, drama, games, and a programming contest. Our respected Head of the Department Brigadier General Md Abdur Razzak gave prizes to the winners of each segment during the prize-giving event.

## **Talent hunt 2022**

In continuation of the remarkable cultural events and nail-biting segments of 2021, the Department of CSE has successfully put together the Talent Hunt again in 2022. This year, the program included the following segments - poem recitation competition, dance competition, singing competition, art competition, debate, and a scavenger hunt. Aside from that, gaming segments included competitions of Valorant, table tennis, FIFA, chess, etc.



*Students enthusiastically participate in the Talent Hunt 22*

# EVENTS AND ACTIVITIES



2015 - 2020

## National Collegiate Programming Contest 2020



*Honorable ICT Minister Junayed Ahmed Polok giving a speech in NCPC 2020*



*Exuberant students participated from different universities and institutes in NCPC 2020*



*Prize giving ceremony of NCPC 2020*

In 2020, MIST organized the National Collegiate Programming Contest. On 22nd February, the National Collegiate Programming Contest (NCPC) concluded in Mirpur Cantonment's Military Institute of Science and Technology (MIST). On 22nd February 2020, Mirpur Cantonment's Military Institute of Science and Technology (MIST) organized the National Collegiate Programming Contest (NCPC). Mr. Zunaid Ahmed Palak, MP, State Minister of ICT Division, graced the ceremony as the Chief Guest and presented awards to the honorees. The Chief Guest spoke about the government's efforts to boost Bangladesh's ICT industry during his address. He stressed the importance of young programmers' programming talent and problem-solving skills in

the development of Digital Bangladesh. He stated his strong desire for our programmers to give their all in the next ICPC in order to bring honor to the country. Major General Md. Wahid-Uz-Zaman, the Commandant of MIST, congratulated the chief guest, dignitaries, and all the invited guests. He stated that MIST would continue to contribute to the development of the country's ICT industry by providing high-quality education and research. He thanked BCC in particular for sponsoring the tournament and all of the sponsors for their help in arranging it.

## CodeWar 2020

To develop the skill of competitive programming and critical thinking of the students of Level-1, MIST Computer Club (MCC) has arranged an intra-MIST programming contest named “CodeWar-2020” over two months. The contests comprised eight individual segments held on the Hackerrank platform. The event was divided into two batches- Pioneer Class and Ingenious Class. The goal was to prepare students for a competitive programming environment so that future MIST teams would be well-prepared and competent. CodeWar had 53 registrations for these contests from 5 departments of MIST, with the majority of the students being from the CSE department. The prize-giving ceremony for Codewar was held after the last contest. Best Problem Solver, Best Progress Maker, and Best CodeForces Solver were among the categories in which prizes were given out. Rayhan Ferdous Faisal, Samee Sevas, Farhan Nasif Nizami, Adib Hossain, Tariq Hasan Rizu, and Ellora Yasi from the CSE department, and Ratul Debnath from the NAME department, are the winners in these categories.

## Visit to The University of Lincoln



*University of Lincoln visit by Maj Gen Md Wahid-Uz-Zaman, Commandant of MIST, and Brig Gen Abdur Razzak, Head of the CSE department*

On the 5th of November 2020, Lincoln International Business School (LIBS), University of Lincoln hosted a research seminar on networking. Maj Gen Md Wahid-Uz-Zaman, Commandant of MIST, and Brig Gen Abdur Razzak, Head of the CSE department with the member of Bangladesh Securities & Exchange Commission (BSEC), Bangladesh Institute of Capital Markets (BICM), and Younus Group attended the seminar. MIST signed the MoU with the University of Lincoln. The

collaboration will explore opportunities that have the potential to feed into the wider university. During their visit, MIST also spent time with the College of Science and Engineering owing to their interests in Robotics, Computer Science, and Architecture.





## Faculty Visit to NSU for LMS

In 2020 when the pandemic broke out, all the schools, colleges, and universities were closed down. MIST was the first university to resume its classes online within one week of the initial announcement of the pandemic. Google classroom, Zoom, and different Microsoft platforms were used by the faculties to share class materials online. To keep a record of the online classes and maintain ease of access to learning materials, introduction to a Learning Management System (LMS), was imperative. MIST again for the first time in Bangladesh took the initiative to build an LMS at the undergraduate level. MIST has again taken the initiative to build an LMS at the undergraduate level for the first time in Bangladesh. As part of the information gathering process, the faculty members paid a visit to the North South University where they used a commercial LMS system named Canvas. Other LMS like doodle, blackboard, etc were also studied for this purpose. The department of CSE has the bragging right to build the LMS system under CACR.



*Visit to NSU by the faculty members of the CSE department*

## Inter-University Programming Contest 2019

MIST had the honor of hosting the Inter-University Programming Contest in 2019. It was the first time the institute got a chance to host such an event. The event garnered huge responses from competitive programmers from all over the country. The student body of the department of CSE and the MIST computer club volunteered and coordinated the whole event backed by the respected head of the department and the MIST Commandant. The chief guest was the retired Professor Dr. M. Kaykobad, BUET. Bangladesh Association of Problem-setters (BAPS) has agreed to be the problem-setters of this contest.



*Photo session with judge panel of IUPC 2019*

## Organizing ICCIT 2015



*Distinguish guests on stage and active participants in the International Conference on Communication & Information Technology, ICCIT 2015*

Department of CSE, MIST organized the International Conference on Communication & Information Technology ICCIT 2015. The conference was held at the Military Institute of Science and Technology, Dhaka, Bangladesh. It provided a unique opportunity for computer and information technology professionals, scientists, engineers, educators, researchers, and students from all over the world to exchange their scientific ideas, views, and thoughts with fellow researchers and participants. This conference addressed some of the more relevant and state-of-the-art issues and topics involved in computer science and engineering and information technology.

## The MOUs of the Department

Sl no	Name of the Organization	Location	Year
1.	ICT Division, Ministry of Posts and Telecommunication and Information Technology, Government of the People's Republic of Bangladesh	Dhaka	2018
2.	Robi Axiata Limited	Dhaka	2019
3.	Department of Information & Communication Technology (ICT), Faculty of Science and Technology (FST), Bangladesh University of Professionals (BUP)	Dhaka	2020
2.	Armed Forces Medical College (AFMC)	Dhaka	2022

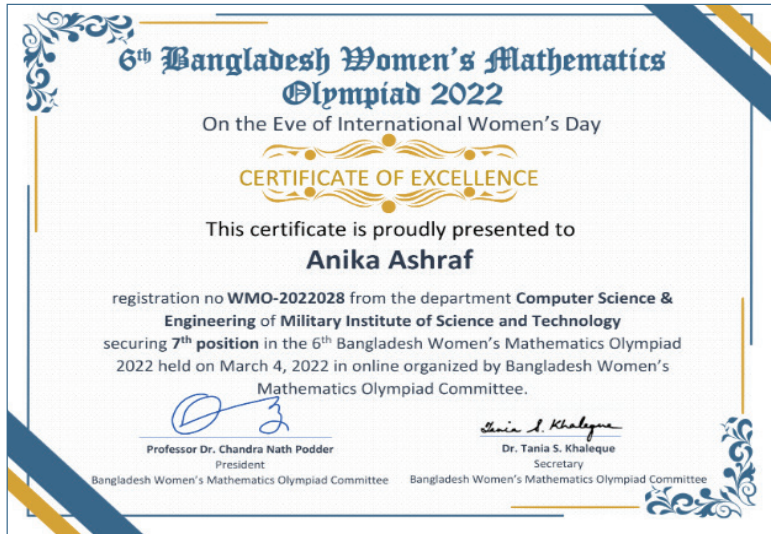




# DEPARTMENTAL ACHIEVEMENTS



### Women's Mathematics Olympiad 2022



*Anika Secured 7th Position in the Bangladesh Women's Mathematical Olympiad 2022*

Anika Ashraf, a student of Level 4 of the Department of Computer Science and Engineering has secured the 7th position in the 6th Bangladesh Women's Mathematical Olympiad 2022. Last year, She was the winner of the 5th Bangladesh Women's Mathematical Olympiad 2021. The 6th Bangladesh Women's Mathematics Olympiad 2022 was conducted on 4th March with a response from a huge number of students. This competition is held for all the female University students from all over the country on the eve of International Women's

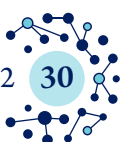
Day(8th March) every year. The event was organized by the Bangladesh Women's Mathematics Olympiad committee, headed by Dr. Chandranath Podder from the department of Mathematics, University of Dhaka.

### National Undergraduate Mathematics Olympiad 2021

Anika Ashraf, a student of Level 4 of the Department of Computer Science and Engineering has secured the 7th position in the 6th Bangladesh Women's Mathematical Olympiad 2022. Last year, She was the winner of the 5th Bangladesh Women's Mathematical Olympiad 2021. The 6th Bangladesh Women's Mathematics Olympiad 2022 was conducted on the 4th of March 2022 with a response of a huge number of students. This competition is held for all the female University students from all over the country on the eve of International Women's Day(8th March) every year. The event was organized by the Bangladesh Women's Mathematics Olympiad committee, headed by Dr. Chandranath Podder from the department of Mathematics, University of Dhaka.



*Rashid Secured 5th Position in the 12th National Undergraduate Mathematics Olympiad 2021*



## Women's Mathematics Olympiad 2021



Anika Ashraf, a student of Level 3 of the Department of Computer Science and Engineering has secured the first position in the 5th Bangladesh Women's Mathematical Olympiad 2021. The prestigious event was held on the eve of Women's Day (8th March) and was organized by the Bangladesh Women's Mathematics Olympiad committee, headed by Dr. Chandranath from the department of Mathematics, University of Dhaka.

*Independence Day Programming Contest 2022 for the students of level 1 organized by MCC*

## Paper Acceptance in IEEE CS BDC WS 2021

Two papers of undergraduate students of the CSE department have been accepted in IEEE Computer Society Bangladesh Chapter Winter Symposium (IEEE CS BDC WS) 2021. Both the works have been supervised by Assistant Professor Dr. Nusrat Sharmin and Lecturer Md Shadman Aadeeb, faculty members of the CSE department.



*Certificate of two accepted papers of undergraduate students of CSE department, supervised by Assistant Professor Dr. Nusrat Sharmin and Lecturer Md Shadman Aadeeb*

# MUJIB 100 Idea Contest 2021

The International Conference on 4th Industrial Revolution and Beyond (IC4IR 2021) was organized by the University Grants Commission (UGC) of Bangladesh and held both physical and virtual online formats from 10 & to 11 December 2021. On the 100th Birth Anniversary of the Father of the Nation of Bangladesh, Bangabandhu Sheikh Mujibur Rahman, and the 50th anniversary of independence of the country, the University Grant Commission (UGC) planned to create a premier international forum for bringing together researchers and practitioners from diverse domains to share cutting-edge research results obtained through the application of artificial intelligence, the internet of things, data analytics, and cloud computing to solve problems in the industrial domain. The scope of the conference included a gathering of the ideas that can support making Bangladesh a smart country with smart citizens; utilizing the best of the technologies available; solving real problems and enhancing the lives and environment for the generations to come.

Submission ID : 857

**Idea Title : Shopner Pathshala : E-learning Management System for Special Children**

Team Members Name : Nazia Shehnaaz Joyah, Fairouz Nawar Nawme, Sazia Tabasum Mim, Md. Tariqueul Islam  
Military Institute of Science and Technology

**Introduction**

Shopner Pathshala is an online educational platform that provides a professionally designed system for children with special needs. This platform provides interactive interface for the autistic children, their parents, therapists, teachers and caregivers. As the pandemic how difficult it is for the autistic children to pursue their education like regular children of their age, this system came into existence.

**Methods**

The guardian will register with his/her necessary information and will be able to register one or more children under this programme. After completing the registration, easy categorized courses will be assigned automatically. The system will record the progress on the basis of test results which will be shown in graphical and tabular form. Analysing the result, the teachers will assign courses of five categories to the students. Guardians will also be able to consult with the doctors about the child's health issues. The six categories of courses/games for the autistic children in our system :  
 1. Speaking 2. Writing 3. Image/pattern /colour recognition  
 4. Math 5. Memory and practical life skills

**Objectives**

Learning disability is divided into four main categories: mild, moderate, severe and profound[0]. This variety of learning disability disrupts the development of one specific category such as speaking/writing/image recognition etc.) for which maximum output of doing online courses can't be received most of the time, even if the category of a course/game is defined the difficulty level isn't defined. Moreover, the number of courses focusing on recognizing Bengali letters and forming meaningful Bengali sentences is very less. Our system ensures division of the courses according to diverse categories in autistic children and includes Bengali learning courses as well. In contrast to most of the websites, our website tracks a child's personal progress and also compares the progress of a group of children using spider graph[1] which is more helpful in assigning courses and providing therapy. It also provides an automated appointment-looking system for the guardians.

**Result Graphs of Children**

**References**

[0]. Medical guidance for DLA decision makers (child care) staff guide, page 432  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1039126/a-child-medical-conditions.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1039126/a-child-medical-conditions.pdf)  
 [1]. A brief introduction of the Spider Chart.  
<https://www.edrawsoft.com/chart/when-to-use-spider-chart.html>

Mujib 100 Idea Contest

#771

**Sustainable solution for ecosystem conservation in Sundarban Mangrove Forest using IoT and ML**

সুন্দরবন ম্যানগ্রোভ বনে ইকোসিস্টেম সংরক্ষণের জন্য টেকসই সমাধান

**Team Leader**

Mubhan Islam

**Members**

The heart of nature, the Sundarban Mangrove forest in Bangladesh is facing danger from illegal logging and animal hunting. This problem is being considered solely and multiple plans have been initiated to stop these law breakers. A digitized and multi-planned solution can be achieved through Machine Learning and IoT devices. Motivated by the fact that any solution for a forest should not disrupt the flow of natural life, we have selected the sound of nature to detect any anomalous event in the forest. Sound of nature is digitized and Potential machine learning algorithms incorporated. Property trained models can differentiate between natural and man-made sounds. So our device is trained to detect any anomalous sounds of tree-cutting and gunshot to detect the location of the incident and inform the authorities right away. The architecture of the whole system reflects cost-effectiveness and energy efficiency. The solar powered raspberry-pi and an integrated microphone collects sound in real-time and classifies them using an ensemble machine learning model. When any anomaly is detected, it transmits the data using LoRa Module to the nearest watch tower to the authority end.

প্রকৃতির প্রান্তরে, বাংলাদেশের সুন্দরবন ম্যানগ্রোভ বনে স্বাভাবিক কাট কাটা ও পশু শিকারের কারণে বিপদের সন্ধ্যা। এই সমস্যাটি দুরূহভাবে বিবেচনা করা হচ্ছে এবং এই জটিল পরিস্থিতির সমাধানের একটি পরিষ্কার ধরা করা হয়েছে। একটি ডিজিটাইজড এবং বহুপরিকল্পিত সমাধান মেশিন লার্নিং এবং আই-ওটি ডিভাইসের মাধ্যমে অর্জন করা যাবে পারে। একটি পুরো জীবন বহন করার সমাধান পাতে প্রকৃতির প্রান্তরে প্রান্তরে না করে বা খারাপ প্রকৃতির বনে, আমরা পুরো জীবন-সংরক্ষণের মতো সমাধান সনাক্ত করতে প্রকৃতির শব্দ বেছে নিচ্ছি। Potensial machine learning algorithms incorporated. Property trained models can differentiate between natural and man-made sounds. So our device is trained to detect any anomalous sounds of tree-cutting and gunshot to detect the location of the incident and inform the authorities right away. The architecture of the whole system reflects cost-effectiveness and energy efficiency. The solar powered raspberry-pi and an integrated microphone collects sound in real-time and classifies them using an ensemble machine learning model. When any anomaly is detected, it transmits the data using LoRa Module to the nearest watch tower to the authority end.

The selected two teams and their ideas were among the top 100 ideas from the CSE department in Mujib 100 Idea Contest 2021

In this Mujib 100 Idea Contest 2021 segment of the 4th Industrial Revolution and Beyond (IC4IR 2021) conference, two teams from the CSE department of MIST were selected among the top 100 ideas. The first idea was “Shopner Pathshala: E-learning Management System for Special Children” and the Second idea was “Sustainable Solution for Ecosystem Conservation in Sundarban Mangrove Forest using IoT and ML.”

## Students' Achievements: 2015-2020

### Medical Robotics Challenge for Contagious Disease 2020



*The UVC Purge Team of MIST received £ 5000 from the respected Commandant for becoming champion in the Medical Robotics Challenge for Contagious Disease 2020 competition*

Six prizes were promised to be awarded in the Application, Design, and Innovation categories. Among all the finalists, Team MIST raised the Flag of Bangladesh securing the Championship in the Application category. The other two Champion teams are John's Hopkins University (USA) in Innovation and Leeds University (UK) in the Design category. As a sign of recognition, Team MIST 'UVC-PURGE' received £5,000 as a Prize-Money and grant for their research. The Judging panel was from John's Hopkins University (USA), Imperial College London (UK), Intuitive Surgical (USA), and KUKA Deutschland GmbH (Germany).

First-ever in Bangladesh, students of the Military Institute of Science and Technology (MIST) have developed a semi-autonomous UVC disinfection robot named 'UVC-PURGE' in an effort to fight against the COVID-19 pandemic. Team MIST participated in a profoundly prestigious global competition on the Medical Robotics Challenge for Contagious Disease 2020 organized by UK Robotics & Autonomous Systems (UK-RAS) Network.



*UVC Purge v2.0*

## TRI ROBOCUP 2020: Digital Project Showcasing



*Team MIST Thermique Secured the 2nd Runner-up Position in the "Digital Project Showcasing" category in the Tri-Robo-Cup 2020*

Team MIST Thermique became 2nd Runner-up in the "Digital Project Showcasing" category in the Tri-Robo-Cup 2020. It was held from September 19, 2020, to September 26, 2020. Brigadier General A K M Nazrul Islam, Ph.D. (Director academic, MIST and counselor, MIST Robotics Club) was present at the closing ceremony of the program. Many teams from different public universities, including BUET, KUET, and CUET participated in this competition.

## Worldwide Facebook Messenger Hackathon



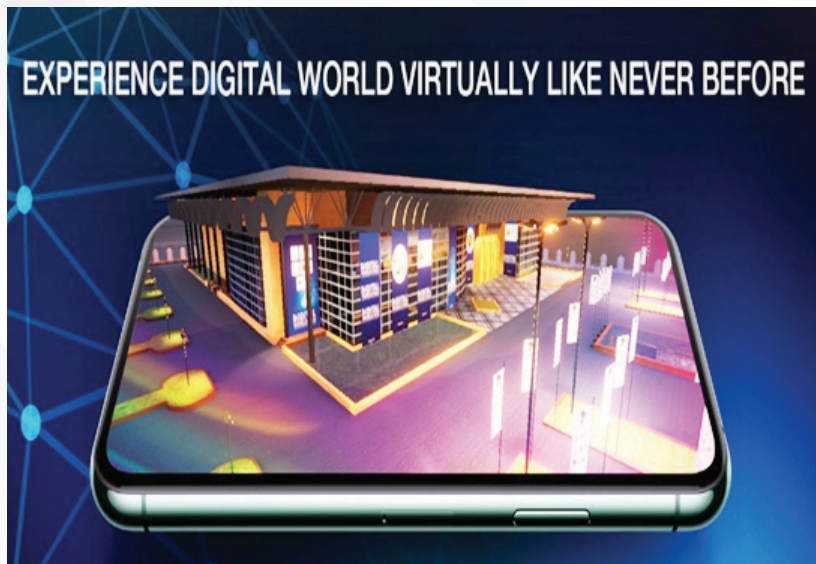
*A team from the CSE Department of MIST secured the 3rd position among 665 teams in the Worldwide Facebook Messenger Hackathon arranged by Facebook Messenger Platform*

One Team from the department of CSE, MIST secured third place in the Worldwide Facebook Messenger Hackathon arranged by the Facebook Messenger Platform. The team consists of two-level 4 students from the CSE department, Tasfik Rahman and Rahul Mohoto. The team designed an Artificial Intelligence (AI) driven Facebook Messenger Chatbot that lets people deliver essential goods to the doorstep so that community transmission of COVID-19 can be prevented to a certain extent and secured 3rd position among 665 teams in the competition and won 1500 US dollars.






## Virtual Stall in DIGITAL WORLD 2020



*The virtual stall of MIST demonstrating two virtual projects in DIGITAL WORLD 2020 virtual project exhibition*


A team from our department participated in DIGITAL WORLD 2020 which was the first-ever virtual project exhibition in Bangladesh. The virtual stall of MIST is demonstrating UVC-PURGE: a semi-autonomous virus disinfection robot for the safe destruction of Covid-19 virus and Thermique: a temperature monitoring system for the mass crowd using thermal imaging.

## Received prizes in Online Essay Competition




**MILITARY INSTITUTE OF SCIENCE & TECHNOLOGY  
(MIST)**

**NOTICE**



**RESULTS OF ONLINE ESSAY COMPETITION**

1. Online essay competition arranged on the occasion of 100<sup>th</sup> Birth Anniversary of the Father of the Nation, Bangabandhu Sheikh Mujibur Rahman was scheduled from 06 August to 13 August 2020. MIST authority is highly pleased for the huge response and heartily congratulates all the participants for their efforts. However, the first three winners as per the declaration of the competition are:
  - a. 1<sup>st</sup> Position: Md Nazirul Ahsan Eshad (201718111), Level -3 of ME Dept.
  - b. 2<sup>nd</sup> Position: Sanjida Islam (201936023), Level -2 of IPE Dept.
  - c. 3<sup>rd</sup> Position: Akib Uz Zaman (201714015), Level -4 of CSE Dept.
2. In addition to the above winners, three more participants as listed below have been considered for their comprehensive understanding on the theme and overall presentation of the essay. Each participant will receive Tk 2000. (Taka Two Thousands).
  - a. ASM Rakibul Hasan (201914056), Level-2 of CSE Dept.
  - b. Jannatul Ferdousi Mim (201911044), Level-2 of CE Dept.
  - c. Md Mirajul Islam (201818003), Level-3 of ME Dept.
3. Office of the Directorate of Students' Welfare (DSW) will arrange handover of the prizes to the winners.
4. For your information and necessary action please.



**MD HABIBUL HUQ**  
Col  
Col Staff  
Tel: 3804 (Mil)  
14 Aug 2020

Two students from the CSE department won the online essay competition arranged on the occasion of the 100th Birth Anniversary of the Father of Nation, Bangabandhu Sheikh Mujibur Rahman, scheduled from 06 August to 13 August 2020. Capt. Akib Uz Zaman (201714015), Level 4 of the CSE department secured 3rd position in the general category. ASM Rakibul Hasan (201914056), Level 2 stood 1st position in a specially considered category. Utmost congratulations to them from the CSE family for their success.

*Students of the CSE department won the online essay competition on the occasion of the Birth Centenary of The Father of The Nation, Bangabandhu Sheikh Mujibur Rahman*

## Innovative Project Award Basis Softexpo 2020

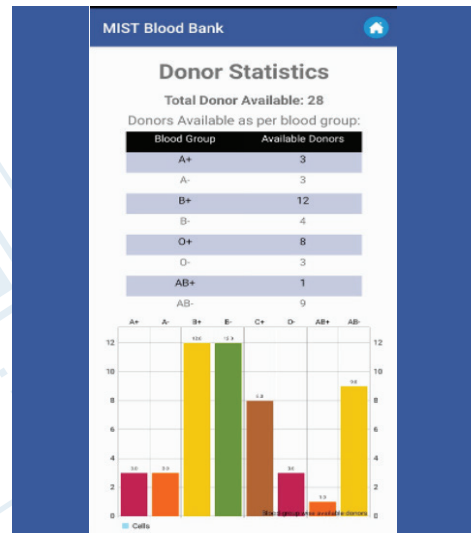
One project of the CSE Department named “IOT-based learning tool for special children” has received an award for being among the top 5 teams from 65 teams around Bangladesh at the 16th BASIS SoftExpo 2020. The team members led by Uzma Hasan (CSE-16 batch) received an award from Honorable State Minister Junaid Ahmed Palak, MP, and Honorable Minister Tipu Munshi, MP on 9th February at the closing ceremony of the grand event. The project was supervised by Lt Col Muhammad Nazrul Islam and Lt Cdr Anisur Rahman. This project also has received the Best project award from the ECE faculty of MIST and has been accepted for publication in the proceedings of the 12th Asian Conference on Intelligent Information and Database Systems to be held in Phuket, Thailand.



*Receiving the award from the honorable ICT Minister at the 16<sup>th</sup> BASIS SoftExpo 2020*

## TRI ROBOCUP 2020 Creative App Contest

“TeamMIST Blood Bank” became the Champion of Creative App Contest at TRI ROBOCUP 2020. The app provides and manages a platform to make a bridge between blood donors and receivers in MIST. The unique app works as a database for storing details about donors and stored blood information. This app will help the patients to get the required blood fast and check the authenticity of the potential donor. Under the guidance of the former head of the CSE department, Brig Gen Mohammad Sajjad Hossain, and faculty member Lt Col Dr. Muhammad Nazrul Islam, the app is developed by Maj Noor Nafiz Islam, OSP, Nafiz Imtiaz Khan, and Md Shadman Aadeeb all from the CSE department respectively.



*“Team MIST Blood Bank” App*

## CTF, JU CSE Fest-2019



A group of students from Level 3 of CSE Department received the 2nd Runner-up position among 30 teams around Bangladesh in the event Capture The Flag (CTF)

A group of students from Level 3 has received the 2nd Runner-up position among 30 teams around Bangladesh in the event Capture The Flag (CTF), a Cyber Security Hacking Competition organized by JU computer club in TigerIT presents Jahangirnagar University (JU) CSE FEST 2019. The name of the team is POISON and the team members are Zubair Islam, Ayon Roy, Mohammad Ishak, and Tahasin Mahmud. TigerIT JU CSE FEST is a national event for students all over the country. A variety of segments are organized for University, College and as

well as school students. TigerIT JU CSE FEST provided a platform for everyone to witness one of the most beautiful and amazing symposia of science & technology with pure delight and enthusiasm. The vision of this event was to bring together students from different institutions and universities across Bangladesh in a delightful environment that would be competitive as well as festive.

## Champion of DIU App Contest 2017

Three Teams from MIST (mist\_roommates, Mist\_hack\_slash, and Mist\_andrew) took part in-app contest arranged by Daffodil International University (DIU). mist\_roommates and Mist\_hack\_slash became champions in two categories of the event.



Champion team from the CSE Department of MIST received prize money in DIU App Contest 2017



*Runners Up team in a project showcasing category from CSE Department of MIST receiving prize money in the IUT ICT FEST 2017*

## **IUT ICT FEST 2017**

Teams from MIST participated in IUT ICT FEST 2017 organized by the Islamic University of Technology, and developed the IoT Based Manhole Monitoring System in the project showcasing category where 35+ teams participated.

## **Champion in Women’s Innovation Compt-2017**

A team from MIST became champion for Anytime Women Job and Image Manipulation Detection in Women’s Innovation Compt-2017 which was organized by the Ministry of Women and Child Affairs and Access to Information (a2i).



*A team from the CSE Department of MIST received prize money for becoming Champion in the “Women’s Innovation Compt-2017” Organized by a2i*

## National Women's Hackathon 2017

Two teams of the CSE Department became Champion in the empowerment category and 1st Runner-up in the agriculture category in the National Women's Hackathon 2017, DIU.



*Champion and 1st Runner-Up Team received prize money in the empowerment category and agriculture category respectively in the National Women's Hackathon 2017, DIU*

## Mahasangram-2017

Team from CSE Department participated in the Parliamentary Debate Competition in Nepal titled "Mahasangram-2017"

MAHASANGRAM 2017



*Team from CSE Department participated in the Parliamentary Debate Competition in Nepal titled "Mahasangram-2017"*

## International Youth Exchange Program 2017



*Student of the CSE department received the National Youth Service Council - Sri Lanka award in the International Youth Exchange Program 2017*

One participant from CSE-14, Sahrima Jannat Oishwee received the “National Youth Service Council - Sri Lanka” award in the International youth exchange program 2017, Srilanka.

## Dhaka University Project Showcasing -2014

Team “Mongol Barota” also became Champion in Dhaka University Project Showcasing -2014 and received Best Project Work in 2013 at MIST.

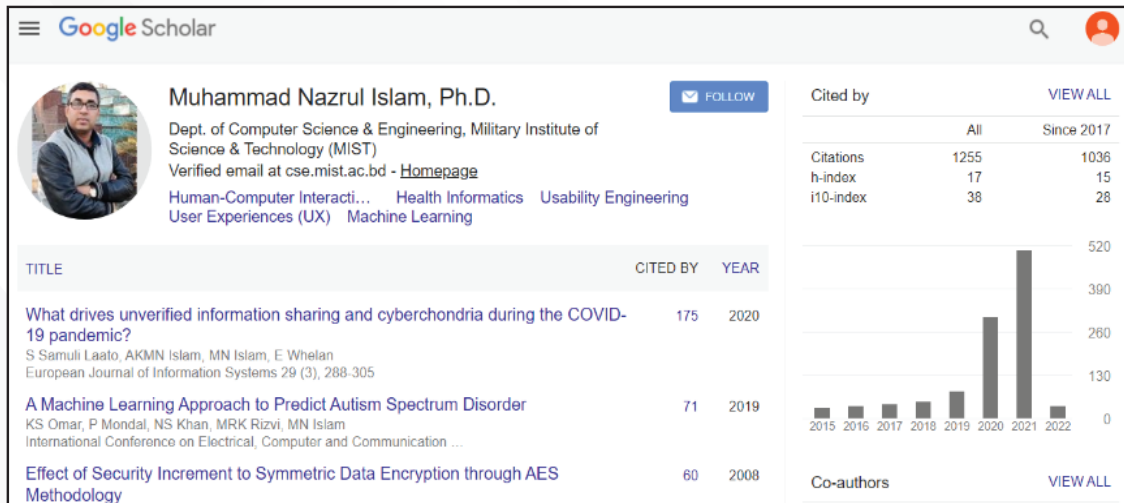


*Team “Mongol Barota” from CSE department receiving prize money for becoming champion in the Dhaka University Project Showcasing -2014*



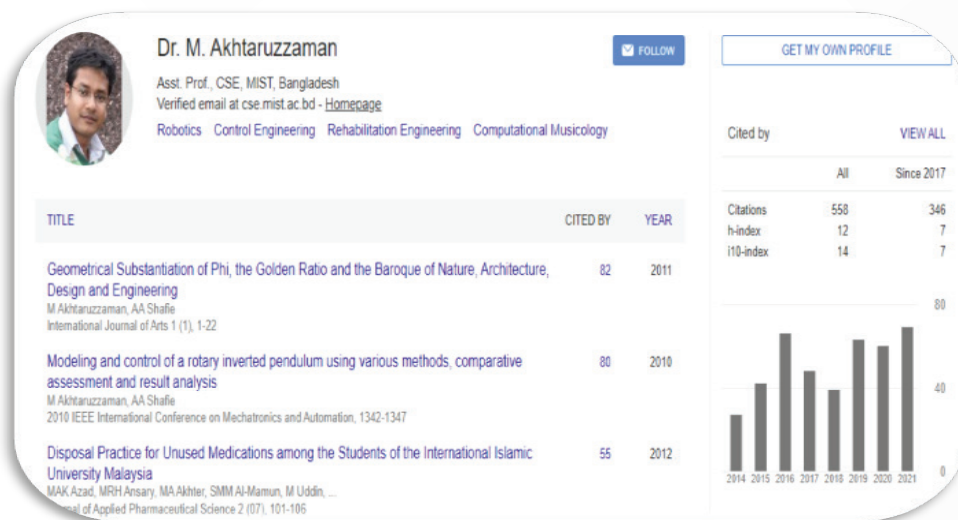
# Faculties' Achievement: 2021-2022

## Achieved Citation Milestone



*Google Scholar Profile of one of the faculty members of CSE department, MIST, Lt. Col. Muhammad Nazrul Islam (PhD, Sigs)*

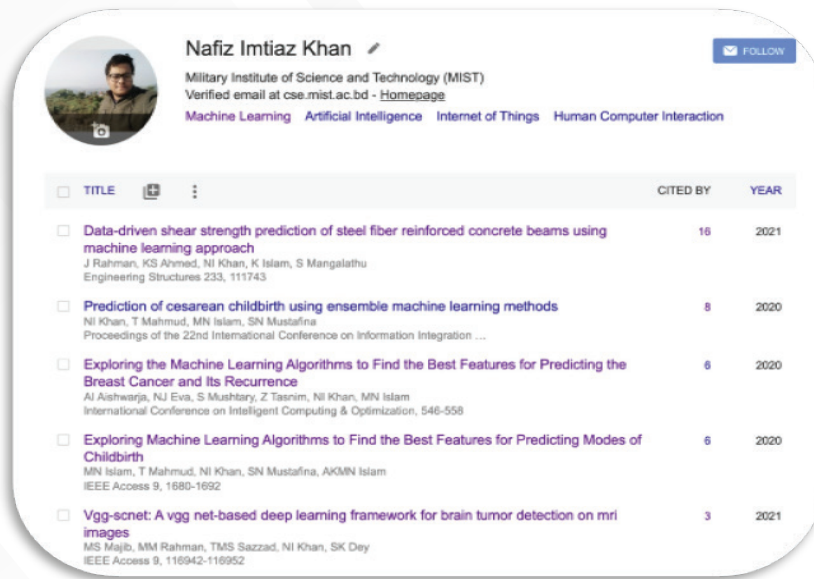
Lt Col Muhammad Nazrul Islam Ph.D. Sigs witnessed a research milestone by achieving 1500+ citations. According to Google Scholar as of May 2022, his total number of citations currently stands at 1516 with an H-index of 18 and an i10 index of 43.



*Google Scholar Profile of Assistant Professor Dr. M Akhtaruzzaman, a faculty member of the CSE department, MIST*

Assistant Professor Dr. M Akhtaruzzaman, achieved 600+ citations . According to Google Scholar as of May 2022, his total number of citations currently stands at 610 with H-index 12 and i10 index 15.

## Published in Top tier Journal by the Youngest Faculty Members



*Google Scholar Profile of Lecturer Nafiz Imtiaz Khan,  
a faculty member of CSE department, MIST*

Nafiz Imtiaz Khan, Lecturer of CSE department, MIST has published 4 research articles in the top tier journals in the year 2020-2021. Two out of four journals were published by Engineering Structures (IF = 4.471), while the other two journals were published by IEEE Access (IF = 3.367).

## BEST PRESENTER Award in IEEE IEMCON 2021

Lecturer Tarannum Zaki from CSE Department got Best Presenter award in the IEEE IEMCON 2021 Conference for her paper titled “An IOT-Based Complete Smart Drainage System For A Smart City”.



*Certificate of BEST PRESENTER Award to former Lecturer  
Tarannum Zaki from CSE Department in the IEEE IEMCON 2021*





# Faculty's Achievement: 2015 -2020

## Best Paper Awards



*Certificate of BEST PRESENTER Award to Lt Col Dr. Muhammad Nazrul Islam and his team from CSE Department in the 5th IEEE WIECON-ECE 2019*

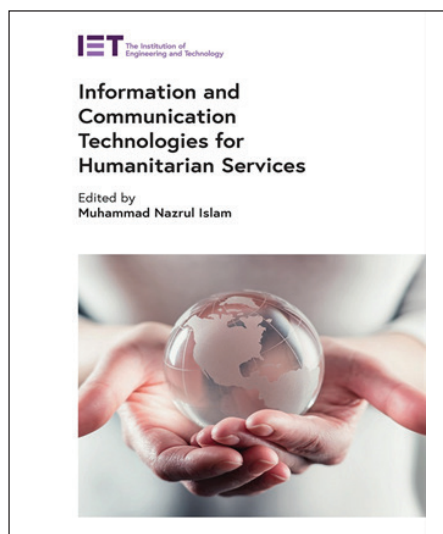
Our faculty member Lt Col Dr. Muhammad Nazrul Islam and his team of other faculty members and Level-4 students have received best paper titled “An IoT based Automated Door Accessing System for Visually Impaired People” in 5th IEEE international Women in Engineering (WIE) Conference on Electrical and Computer Engineering 2019

Proposed Secure Mobile Money Transfer System for SME in Bangladesh: An Industry 4.0 Perspective” presented at IEEE International Conference on Sustainable Technologies for Industry 4.0 (IST 2019), Dhaka, Bangladesh.

Lt Col Dr. Muhammad Nazrul Islam and his team again received ‘Best Paper Award’ for a research article titled “A

Lt Col Dr. Muhammad Nazrul Islam and his team received ‘IEEE EMBS Bangladesh Chapter Best Paper Award’ for a research article titled “An Improved Algorithm for Sorting Chromosomes by Inverted Block-interchanges Based on Permutation Group” presented at Int Conf on Medical Engg, Health Informatics and Tech (MediTec 2016), Dhaka.

## Book publication by CSE faculty member



An edited book, authored by Lt. Col. Muhammad Nazrul Islam of CSE department under the title “Information and Communication Technologies for Humanitarian Services”, has been published by an internationally reputed UK-based publisher The Institute of Engineering and Technology (IET).

*Book edited by Lt Col Dr. Muhammad Nazrul Islam is published by IET*

## Gaining Recognition in Competitions / Awards Received in Competitions

Assistant Professor Sharifa Rania Mahmud has participated in Smart Apps Development Training for University Teachers: PhoneGap and other Platforms in 2014 fully supported by the MoICT. She participated in a Mobile Apps Idea Contest and her team got the first position in the contest.



*A team from CSE Department of MIST receiving award for securing 1st position in the Mobile Apps Idea Contest of the Smart Apps Development Training for University Teachers: PhoneGap and Other Platforms.*





**DEPARTMENT'S  
ADVISORY PROJECTS**

# BARTA

Commercial mobile communication applications like WhatsApp, Viber, Telegram, etc are widely used and are not secured for military use. The necessity was felt for a secured mobile comm means for internal use for a long time. The CSE department of MIST continued with R&D and developed the app. The app was launched by respected CAS on 24 May 2021 and is now being officially used by the Bangladesh army.



*“BARTA” App Developed by  
CSE department of MIST*

BARTA is a user-friendly cross-platform (Android and iOS) end-to-end encrypted messaging application with audio and video calling features. All modules of BARTA were developed following security threat and risk modeling, protected from all kinds of external and internal threats/attacks. Penetration testing and security audit were also done. It uses corporate mobile numbers as unique identifiers and secures all communication amongst BARTA users with end-to-end encryption. Nothing is stored or recorded in the BARTA server, which acts as a network facilitator only. BARTA is not hosted in 'Play/Apple Store' and thus does not sync msg to a cloud, keeping everything on user devices. BARTA features include In-house Development, Ownership & Copyright of Source Code, Localized Server hosted at Army Data Cen, and End-to-end encryption with a customized security algorithm. Only authorized and registered users are allowed to install the app and only BARTA registered users are available on the in-app contact list. BARTA has a distinctive feature “Self-destructive Chat” which lets users set a self-destruct timer for every message in

conversation at a set time (15 Sec to 2 mins). BARTA also restricts the recording of conversations and capturing screenshots of the Chat window. All Data/Photos/Media is stored in a ‘Protected Vault’ / ‘Sandbox’ on the user's mobile with proper encryption.



*The Inauguration Ceremony of “BARTA: Secured Mobile Communication App”*



# NOTABLE ACCOMPLISHED PROJECTS



# UVC-Purge v2.0

## Description

For the first time in Bangladesh, students of Computer Science & Engineering (CSE) Department of Military Institute of Science and Technology (MIST) have developed a semi-autonomous UVC disinfection robot named “UVC-PURGE” in an effort to fight against current COVID-19 Pandemic. UVC-PURGE is very robust, compact and user friendly in nature. This robot has been equipped with six T5 UVC (254 nm) lamp to destroy SARS-CoV-2 virus (coronavirus) effectively in a standard 12' x 16' room with a disinfection time of 2-3 minutes. The Robot provides real-time camera feedback for better navigation. While disinfecting this semi-autonomous robot is capable enough to avoid any obstacles in that room. Being fully wireless controlled by mobile app or computer, UVC-PURGE is very user-friendly with 1600 square feet coverage area and provides a battery backup of 2 hours. It is applicable for any indoor environment such as empty COVID patient ward, empty ICU, operation theater, office room, classroom, corridor, personal apartment etc. Under the dynamic leadership of Honorable Prime Minister Sheikh Hasina, the outline of the “Digital Bangladesh” was unveiled in 2009. Through the extensive use of information and technology, this outline has been proven to be very effective in improving the socio-economic status and living standards of the people. Likewise, the use of robotics and autonomous systems has become prevalent in the country at a significant level and its scope is gradually increasing. During this covid-19 pandemic, Bangladesh is also implementing various ICT based projects to reduce the impact of the pandemic. This Semi-autonomous robot will accelerate the execution of that novel procedure and will encourage young people to learn about robotics and autonomous systems.

## Member of UVC-PURGE

Captain Akib Zaman, CSE-17  
Shoeb Ahmed Tanjim, CSE-18  
Shafayetul Islam, CSE-18  
Shah Md Ahasan Siddique, ME  
Nafiz Imtiaz Khan, CSE-17  
Riasat Haque, CSE-19  
Md Rashid Ul Islam, CSE-20  
M Rayhan Ferdous Faisal, CSE-20



## Features

- Optimum UVC exposure lamp to disinfect.
- Real-time camera feedback system.
- Semi-Autonomous Nature.
- Long lasting battery backup.
- User friendly control system on both mobile and computer with a large area of coverage.
- Cost-effective.

## Application Field

Applicable for any indoor environment such as classroom, office room, operation theater, ICU, apartment, corridor, market etc.



# Thermique



*Thermique: A contactless temperature sensing module to hold back Covid-19 contamination*

## Project Overview

In a situation like global pandemic, one can get easily infected even by coming the slightest closer to an infected person. In this situation, fever can be indicative of a person having the risk of being infected with COVID-19. This will help alert people to be more proactive and not allow an infected person to enter a populated working environment. In this way, we could try to stop the widespread infection of the virus. A very important and initial challenge in the epidemic of COVID-19 is to identify more probable patients out of a crowd of people. That's when the idea of Project THERMIQUE-Temperature Detection Using Thermal Image for COVID-19 Screening was generated. Using thermal scanning devices with sensors, our aim is to scan a person's temperature & also a time-attendance management system for identification purposes & monitoring it in real-time.

## Description

One of the most crucial parts of controlling COVID-19 is preventing its widespread infection. That's why, it is necessary to identify a person with a high temperature. Once identified, probable patients may be sent for more COVID-19 tests for further identification & this would lead to preventing mass infection of the virus. Our idea includes -

- The exact body temperature of the person will be recorded in real-time from his facial expressions using a radiometric sensor.
- Before entering into the building, a person has to stand in front of a booth, where there is a display, a lens, and an RFID reader. The person is asked to make sure his/her face is visible in the display, which will always show a thermal heat map view of whatever is in front of the lens. When the face is aligned, they can use the RFID reader to authenticate their presence with their ID card. In the database, the ID of the person, their name, the timestamp of this event, and the facial temperature will be logged.

## Features

- Obtaining the identity and exact body temperature of every person entering through the gate in real-time.
- Alerting the authority when the temperature of a person exceeds a certain threshold value.



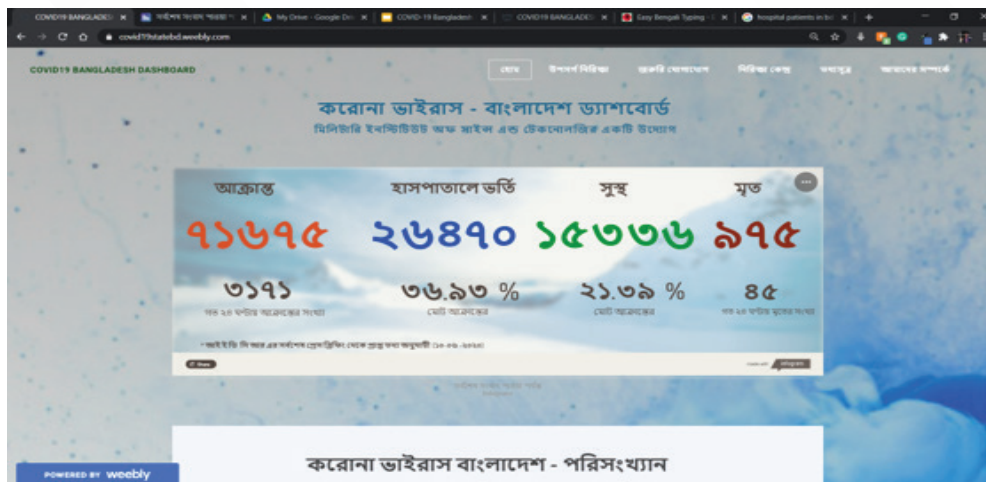


- 3. Call for Doctor:** Some doctors are ready to give emergency services through video or audio calls.
- 4. Authentic Source of Information:** Anyone can find real and authentic information so that there is no chance of being confused by fake news. These information can be of different types, such as, exact information of infected people around the world, different rates like infected rate, death rate, etc., how to work from home to earn money or how to study from home, where to seek any help during this pandemic, which organizations are giving home services, etc.

## Team Memeber

- Brigadier General Mohammad Sajjad Hossain, Former Head of the Department
- Lieutenant Colonel Muhammad Nazrul Islam, Ph.D., Instructor Class-A
- Shahriar Rahman Khan, CSE-17
- Md. Rezwana-A-Rownok, CSE-17
- Syed Rohit Zaman Tusher, CSE-17
- Samiha Raisa Zaman, CSE-17
- Maj Noor Nafiz Islam, CSE-17

## COVID-19 - Bangladesh Dashboard



*The first Covid 19 Bangladesh Dashboard developed by department of CSE*

## Project Overview

1. A website that gives insight to the COVID-19 situation in Bangladesh through the latest info presented in a detailed, graphical, and contextual format. The site also includes a COVID symptom checker tool and hospital, and test center contact numbers along with their respective addresses.
2. It was one of the first websites of its kind in Bangladesh when it was launched on March 23rd March and the ICT ministry launched the official website in late April.
3. Over 10000+ views as of now.
4. Accessible online at [www.coronastate.mist.ac.bd](http://www.coronastate.mist.ac.bd)



## Key Features

1. **Contextual Data:** Latest updates on the state of COVID-19 state in a graphical, contextual, and analytical manner.
2. **Self-Test Tool:** Users can take an online test and self-diagnose their “probability” of being Covid-19 positive. This was developed based on the symptoms chart by WHO.
3. **Emergency Contact info:** The website also contains emergency contact info, hospital and test center numbers, test forms etc.
4. **Hospital and Test Center Addresses:** Contains website and test center addresses with google map links to help out those in need.

## Team Member

- Brigadier General Mohammad Sajjad Hossain, Former Head of the Department
- Colonel Siddharth Malik, SM, Senior Instructor
- Raiyan Rahman, Lecturer
- Muhaimin Bin Munir, Lecturer

# Automated Temperature Based Screening And Disinfectant Tunnel



*Automatic Disinfectant tunnel*

## Project Overview

The project was designed to automate the process of temperature based incoming human traffic screening and disinfection process while entering any institution in this pandemic.

## Key Features

1. **Automated Screening:** Screens the incoming human traffic based on body temperature and labels them as “Safe” or “Unsafe” to enter by buzzer/audible sounds.
2. **Automated Disinfectant Tunnel:** Once someone passes the screening test, they can move through the tunnel and enter. The sensors detect human movement and spray enough disinfectant to disinfect the person automatically.
3. **System Integration:** Both of these systems will be integrated to provide complete automation of the current process.

## Team Member

- Brigadier General Mohammad Sajjad Hossain, Former Head of the department
- Dr. Md. Mahbubur Rahman, Professor
- Raiyan Rahman, Lecturer
- Muhaimin Bin Munir, Lecturer
- and Students of CSE department



# Osmany Hall Mess Management System



*Respected Commandant with the Osmany Hall Mess Management System Developers*

After the establishment of Osmany Hall all the accounts related to the mess were maintained in black and white. In order to automate the mess system first software was introduced around 2008 but needed lots of optimizations. In 2019 the second version of this software was introduced by a group of students from CSE-16 under the supervision of Colonel Mahboob Karim. Yet it had some limitations of features and needed a lot of constraints to apply to maintain the consistency of the system. In order to make the software more user-friendly, this new system is developed by collaborating with the previous developer team.

## Description

This is a desktop-based mess management software developed for Osmany Hall, Military Institute of Science and Technology. This system is developed after analyzing user experience issues of the previous system where the system was less friendly for users and the system was rigid or static to its term. Thus for covering up such issues this new system is designed with more upgraded features and users. A number of relevant features such as student registration, student daily mess bill, daily purchase statement, mess bill due/advance, daily consumed expense, security deposit information, etc are implemented in the current system. New user roles like Hall Provost, Hall Manager, and Accountant are added based on the requirements of the users. Furthermore, record keeping and bill generation is done with more efficiency and accuracy. Thus the new software is a powerful replacement of the previous one with a professional outlook.

## Features

1. **Student Registration:** Mess manager can add or update the information of the residents of osmany hall.
2. **Purchased Item Information:** The responsible user can add or update the information about the purchased item with its price and quantity.

3. **Daily Meal Statement:** The mess manager can create a meal sheet for each student and each student's daily meal is tracked for accurate billing.
4. **Daily Consumed Item Information:** Mess manager can add or update the information of daily consumed items with its price, quantity and memo references.
5. **Group Students based on Consumed Meals:** If multiple items are cooked in a single day this system facilitates the user to divide the students according to their consumed meal so that they will only get the bill for the consumed meals.
6. **Generation and Notification Of Monthly Bill:** After permission of higher authority ,the accountant can produce bills for every student of that month. Generated bills will be notified to all students via email.
7. **Successful Payment Notification:** As soon as payment of a student is received in the system, it will send an email to the respective student.
8. **Flexible/Privileged Usage of the System:** It is a three tier user system where if any change is needed higher privileged users can grant lower users access.

## Future Works

The whole Osmany Hall management can be added to this system. In that case, migrating the previous data will be a big deal as it is not organized properly. Proper support from authorities will be helpful to solve the challenges easily.

## Chief Patron

1. Major General Md Wahid-Uz-Zaman, ndc, aowc, psc, te  
Commandant, MIST

## Supervisors

1. Professor Dr. M Kaykobad
2. Colonel Shahjahan Majib
3. Brigadier General Mohammad Sajjad Hossain
4. Lieutenant Colonel Md Fazle Rabbi
5. Lecturer Swapnil Biswas

## Team Member

- A. H. M. Zobyer, CSE-17
- Masrur Hasan Mahin, CSE-17
- Ariful Islam Tarek, CSE-17



## Dr. Md. Mahbubur Rahman

Research theme: Cyber-security, Data Mining, Bioinformatics



DR. MD. MAHBUBUR RAHMAN (Member IEEE, Fellow IEB) received his B.Sc. in Computer Science and Engineering from Bangladesh University of Engineering and Technology, (BUET) in 1993. He did his Masters study in Computer Science from Asian Institute of Technology (AIT), Thailand in 1998. He obtained his Ph.D. degree in Computer Science from Japan Advanced Institute of Science and Technology (JAIST), Japan, in 2004. He conducted his post-doctoral research at Tohoku University, Japan in 2007. He is currently serving as a Professor in the Department of Computer Science and Engineering (CSE), Military Institute of Science and Technology (MIST), Bangladesh. He is the recipient of a distinguished student award in his Ph.D. study. He has authored a substantial number of research articles in reputed Journals and International Conference Proceedings. He is the recipient of the best paper awards from 3 international conferences. His research interests include Image Processing, Network Security, Pattern Recognition, Health Informatics, AI, and Machine Learning.

Dr. Mahbub is currently working on Generative Adversarial Network based zero-day attack detection model development and generation and learning a Bangla hand-written character recognition model, Computational off-loading determination in an FoG using Deep Reinforcement learning framework, Service provisioning in cloud based vehicular cloud. His works also include the application of graph neural networks in image segmentation, and malware detection framework using transfer learning.



## Lt Col Muhammad Nazrul Islam

Research theme: Human-computer Interaction (HCI),  
Health Informatics and Machine Learning



MUHAMMAD NAZRUL ISLAM received the B.Sc. degree in computer science and information technology from the Islamic University of Technology, Bangladesh, in 2002, the M.Sc. degree in computer engineering from the Politecnico di Milano, Italy, in 2007, and the Ph.D. degree in information systems from Åbo Akademi University, Finland, in 2014. Before joining MIST, he was working as a Visiting Teaching Fellow with Upp-sala University, Sweden, and as a Post-Doctoral Research fellow with Åbo Akademi University. From 2003 to 2012, he was also a Lecturer and an Assistant Professor with the Department of Computer Science and Engineering, Khulna University of Engineering and Technology (KUET), Bangladesh. He is currently an Associate Professor with the Department of Computer Science and Engineering, Military Institute of Science and Technology (MIST), Dhaka, Bangladesh. He has authored more than 150 peer-reviewed publications in international journals and conferences, besides two books. He is the associate editor of BMC Research Notes and MIST International Journal of Science and Technology (MIJST) and. He was the Principal Investigator of five research projects from the Government and the Industry. He has received a number of prestigious scholarships, grants and awards in recognition of his research contribution. Dr. Islam has also received several best paper awards from international conferences, and the best faculty in research work award in 2016, 2017 and 2019 at MIST. His research interests include but are not limited to human-computer interaction (HCI), machine learning, health informatics, military information systems, information systems usability, and computer semiotics. He is a member of the IEEE and the IEB (Engineering Institute of Bangladesh) and a TPC member of over fifteen international conferences.

Dr Nazrul is currently working on the following research projects- CervivorBD: Development of an Assistive application for the cervical cancer patients in Bangladesh, Detecting Alcoholic: Identification of intoxicated/alcoholic people based on situational Impairment, Predictis: An IoT and ML based application to predict risk level of cardio-vascular disease, Predicting polycystic ovary syndrome through machine learning technique using patients' symptom data and ovary ultrasound images. His recent works also includes Blockchain based framework for preventing medicine counterfeit in context of Bangladesh, Development of an IoT and blockchain integrated vertical farming system.



## Dr. Md. Akhtaruzzaman

Research theme: AI, Robotics



Dr. Md. Akhtaruzzaman received the B.Sc. degree in computer science and engineering (CSE) from International Islamic University Chittagong (IIUC), Bangladesh in 2005. He received the M.Sc. degree in mechatronics engineering (MCT) from Kulliyah of Engineering, International Islamic University Malaysia (IIUM), Malaysia in 2012. He was awarded a Ph.D. in Engineering (Mechatronics & Robotics) from Kulliyah of Engineering, IIUM, Malaysia in 2018. During his professional career, Dr. Akhtaruzzaman was a Programmer, a Software Engineer, and a Research Assistant. Recently he is associated with Military Institute of Science and Technology (MIST), Dhaka, Bangladesh as an Assistant Professor in the department of Computer Science and Engineering (CSE). He is also associated with DREAM Robotics Ltd. , Dhaka, Bangladesh as a Consultant and Research scientist. Dr. Akhtaruzzaman has published 51+ research articles including journals, conferences, books, and book chapters in Robotics, Mechatronics system design, Artificial Intelligence (AI), Modeling and control, and communication engineering. He was also awarded several Gold Medals in recognition of his research works. His research interests include robotics, AI, modeling and control of mechatronics systems, rehabilitation engineering, computational musicology, algorithm design, and communication engineering.

One of his current research focuses is autonomous robot navigation and path planning. He is working on a military portable robot for autonomous surveillance and monitoring. He has recently started another project on the Medical Decision Support System (MDSS) leading to an autonomous system for Fluid Resuscitation of Burn Patients based on the Fuzzy Inference System. Dr. Akhtaruzzaman is highly motivated to focus on the field of robotic research and development. He is also planning to launch a research group named “Quantum Robotics Research Group (QRRG)” and invite all the interested students to join and contribute with their valuable efforts, thoughts, and intellectual inputs.





## Dr. Nusrat Sharmin

Research theme: Neuro-informatics, Computer Vision



Dr. Nusrat Sharmin achieved a B.Sc. degree in computer science and engineering from the Ahsanullah University of Science & Technology (AUST), Dhaka, Bangladesh, in 2007, an M.Sc. degree in Advanced Computing Systems from the Lucian Blaga University of Sibiu, Romania, in 2011. In 2017, she earned a Ph.D. in Information and Communication Technology from the University of Trento, Italy. Dr. Nusrat joined the Department of CSE, Military Institute of Science and Technology as an Assistant Professor in March 2021. Before joining MIST, she worked as Assistant Professor in AUST. During her Ph.D. (2013-2017), she received research grants from Fondazione Bruno Kessler (Italy) for the project Machine Learning for Neuroscience, and she also got an Erasmus Mundus scholarship during her master's study in Romania. Dr. Nusrat has published 30+ research articles in hi-indexed journals, national and international conferences, books, and book chapters in Neuroinformatics, data mining, knowledge discovery, image processing, and computer vision.



Dr. Nusrat research interests include

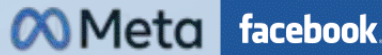
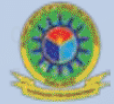


Neuro-informatics and Computer Vision. Currently, she is collaborating with Emanuele Olivetti, Senior Research Scientist, (Neuroinformatics Laboratory (NILab) <http://nilab.fbk.eu>), Italy, and Chiara Riccardi, Ph.D. Student NILAB, Italy on the project title machine learning approach to segment bundles and working on the proposal with Thomas Tischhauser, Neuroscience titles Soft Computing Techniques in Neuroimaging. Her other ongoing

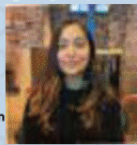
research projects are Deep learning in Brain Stroke Detection and Deep Learning in Fundus Images to detect Eye Diseases.

# CSE ALUMNI

## Alumni of CSE, MIST



Ihtiaz Ishmam Rahman  
CSE 15



Sadia Zahin Diya  
CSE 15



Md Shafiqul Islam Shovon  
CSE 14



Md. Mahmudur Rahman  
Mamun  
CSE 13



Nazmus Sakib  
CSE 12



Ahmed Shehab Khan  
CSE 09



Kishwar Shafiq Anik  
CSE 10



Fahim Ahmed  
CSE 14



Mehnaz Maharin  
CSE 13



Sheikh Faisal Avash  
CSE 14



Robin Ahmed  
CSE 08



Md Merajul Islam  
CSE 07



Md. Asif Mahmud  
CSE 12



Sharmista Bardhan  
CSE 09



Sharmista Bardhan  
CSE 11



Joarder Kamal  
CSE 04



Nayeema Lail  
CSE 03



And many more alumni in...



Taufiq Khan  
CSE 05



Ashfaque Ahmed  
CSE 12



Md. Niaz Prodhan  
CSE 09





**Ihtiaz Ishmam Rahman**  
Batch: CSE 15  
**Security PgM Support Engineer**  
November 2020 - Present

### Previous Work Experience:

**CodeMarshal** - Software Engineer  
February 2019 - October 2020  
**Mukto Software Ltd.**- Software Engineer Intern  
November 2017 - January 2018



**Sadia Zahin Diya**  
Batch: CSE 15  
**Software Development Engineer**  
January 2022 - Present

### Previous Work Experience:

**TigerIT Bangladesh Ltd.** -Software Engineer  
February 2019 - August 2020  
**Grameenphone Ltd** -Internship  
December 2017 - December 2017



**Md Shafiu Islam Shovon**  
Batch: CSE 14  
**Software Development Engineer**  
March 2021 - Present

### Previous Work Experience:

**TigerIT Bangladesh Ltd.**- Software Engineer  
November 2020 - February 2021  
**CodeMarshal** - R&D Engineer  
November 2019 - November 2020



**Fahim Ahmed**  
Batch: CSE 14  
**Software Development Engineer II**  
February 2022 - Present

### Previous Work Experience:

**bKash Limited** -Senior Software Engineer,  
January 2021 - February 2022  
**Samsung R&D Institute Bangladesh**- Senior  
Software Engineer April 2020 - December 2020



**Mehnaz Maharin**  
Batch: CSE 13  
**Business Analyst**  
June 2021 - Present

### Previous Work Experience:

**Fixer Connect Inc.**- Business Data Analyst  
November 2020 - April 2021  
**Northeastern University**- Graduate Teaching  
Assistant September 2019 - May 2020



**Asif Mahmud**  
Batch: CSE 12  
**Software Development Engineer**  
April 2022 - Present

### Previous Work Experience:

**Guardian EMR**-Software Developer  
March 2021 - March 2022  
**Shoppers Drug Mart**-Front Store Supervisor  
August 2020 - March 2021



**Sharmistha Bardhan**  
 Batch: CSE 11  
**Software Development Engineer**  
 July 2021 - Present

**Previous Work Experience:**  
**Modular Mining**-Software Engineer I  
 April 2019 - July 2021  
**University of California, Riverside**  
 Junior Specialist (Research Assistant)  
 October 2018 - April 2019



**Md Shafiul Islam Shovon**  
 Batch: CSE 14  
**Research Scientist**  
 November 2021 - Present

**Previous Work Experience:**  
**Alarm.com**-Computer Vision Scientist  
 October 2020 - November 2021  
**University of South Carolina**- Research  
 Assistant , July 2015 - August 2020



**Meta- Facebook**



**Md. Mahmudur Rahman Mamun**  
 Batch: CSE 13  
**Software Engineer**  
 November 2020 - Present

**Previous Work Experience:**  
**Enosis Solutions** -Senior Software Engineer  
 May 2018 - October 2020  
 Software Engineer  
 February 2017 - April 2017



**Nazmus Sakib**  
 Batch: CSE 12  
**Software Engineer**  
 August 2021 - Present

**Previous Work Experience:**  
**Walmart Global Tech**- Software Engineer III  
 March 2020 - August 2021  
**Fannie Mae**- Software Engineer II  
 October 2018 - February 2020



**Ahmed Shehab Khan**  
 Batch: CSE 09  
**Research Scientist**  
 September 2020 - Present

**Previous Work Experience:**  
**University of South Carolina**- Graduate  
 Research Assistant, January 2015 - July 2020  
**Facebook**- Software Engineer Intern  
 May 2019 - August 2019

# ORACLE

## Oracle



**Robin Ahmed**  
Batch: CSE 8  
**Senior Technology Cloud Engineer [JAPAC Region]**  
January 2022 - Present

### Previous Work Experience:

**ADA-** Data Architect  
February 2021 - January 2022  
**Robi Axiata Limited-** Manager, Head of EDW & Analytics Development, EDW & Analytics, IT September 2017 - January 2022



**Md Merajul Islam**  
Batch: CSE 07  
**Senior Software Engineer**  
January 2020 - Present

### Previous Work Experience:

**Accenture-** Senior Application Developer (Full Stack), 2019 - 2020  
**IBM-** Software Development Engineer (Full Stack), 2015 - 2019

# IBM

## IBM



**Joarder Kamal**  
Batch: CSE 04  
**Cloud Architect - Data and AI Platforms, Customer Success**  
September 2021 - Present

### Previous Work Experience:

**Amazon Web Services (AWS)-** Software Solutions Architect - ISV, B2B, and SaaS  
October 2020 - August 2021  
**Consultant -** Data, Analytics, ML, AWS Professional Services, September 2019 - October 2020



**Nayeema Lail**  
Batch: CSE 03  
**IT Specialist**  
March 2017 - Present

### Previous Work Experience:

**Dalhousie University-** Web Developer  
November 2016 - March 2017  
**Atlantic Central-** IT Programmer  
June 2016 - August 2016

# aws

## Amazon Web Services (AWS)



**Sheikh Faisal Avash**  
Batch: CSE 14  
**Software Engineer**  
July 2021 - Present

### Previous Work Experience:

**European Bioinformatics Institute EMBL-EBI**  
Full Stack Software Engineer  
February 2020 - July 2021  
**Samsung R&D Institute Bangladesh-**  
Software Engineer, April 2018 - December 2019



## Google



**Kishwar Shafin Anik**  
Batch: CSE 10  
**Research scientist**  
March 2022 - Present

### Previous Work Experience:

**UC Santa Cruz Genomics Institute**- Graduate Research Assistant, September 2017 - March 2022  
**UC Santa Cruz**- Graduate Assistant  
September 2016 - March 2022



## Booking.com



**Ashfaque Ahmed**  
Batch: CSE 12  
**Backend Developer**  
March 2022 - Present

### Previous Work Experience:

**bKash Limited**-Assistant Lead Engineer  
May 2021 - February 2022  
**Senior Engineer**  
October 2018 - April 2021



## Apple



**Md. Niaz Prodhan**  
Batch: CSE 09  
**Logistics Supply Chain Specialist**  
October 2019 - Present

### Previous Work Experience:

**Match Wheel Ltd**- Assistant Manager, Software Division, March 2018 - January 2019  
**Oployeelabs Ltd.**- Senior Software Engineer  
February 2015 - February 2018



## NVIDIA

## NVIDIA



**Ashfaque Ahmed**  
Batch: CSE 12  
**Backend Developer**  
March 2022 - Present

### Previous Work Experience:

**bKash Limited**-Assistant Lead Engineer  
May 2021 - February 2022  
**Senior Engineer**  
October 2018 - April 2021



# PUBLICATIONS BY FACULTY: 2021-2022



## Journal Articles

1. Article titled “ Analyzing the Global Impact of COVID-19 Vaccination Progress: Insight from an Exploratory data analysis “ written by **Prof. Dr. Md. Mahbubur Rahman** and others, is published in Human Vaccines & Immunotherapeutics, 2022 (IF: 3.452)
2. Article titled "Phoenix: Towards Designing and Developing a Human Assistant Rover" written by **Prof Dr. Md. Mahbubur Rahman, Asst. Prof. Dr. Md. Akhtaruzzaman** and others is published in IEEE Access, 2022, (IF: 3.367)
3. An article titled “An Efficient Authentication Scheme for Secured Service Provisioning in Edge-enabled Vehicular Cloud Networks towards Sustainable Smart Cities” written by **Prof Dr. Mahbubur Rahman** and co-author(s) is published in Sustainable Cities and Society (IF=7.59).
4. Article Titled “UVC-PURGE: A Novel Cost-effective Disinfection Robot for combating COVID-19 Pandemic” written by **Lt Col Muhammad Nazrul Islam** and co-author(s) is published in IEEE Access, 2022 ( IF: 3.367).
5. Article titled “IoT-based Serious Gaming Platform for Improving Cognitive Skills of Children with Special Needs.” written by **Lt Col Muhammad Nazrul Islam** of and co-author(s) is published in Journal of Educational Computing Research , 2022. ( IF: 3.088).
6. Article titled “Digital intervention to reduce counterfeit and falsified medicines: A systematic review and future research agenda” written by **Lec Iyolita Islam and Lt Col Muhammad Nazrul Islam** and co-author(s) is published in Journal of King Saud University-Computer and Information Sciences, 2022 (IF: 13.473).
7. Article titled “Developing a Novel Hands-free Interaction Technique based on Nose-Teeth for Accessing the Smartphone”, written by **Lt Col Muhammad Nazrul Islam and Lec Md Shadman Aadeeb** of CSE Department and co-author(s) is published in IEEE Access, 2022 (IF: 3.367).
8. Article titled “Automated Reasoning of Vehicle Brake force: A Fuzzy Inference System Model” written by **Prof Dr. Md. Mahbubur Rahman** and **Asst. Prof. Dr. Md. Akhtaruzzaman** is published in International Journal of Reasoning Based Intelligent Systems
9. An article titled “VGG-SCNet: A VGG Net based Deep Learning framework for Brain Tumor Detection of MRI Images” written by **Col Mohammad Shahjahan Majib, Prof. Dr. Mahbubur Rahman**, Lec Nafiz Imtiaz Khan of CSE Department and co-author(s) is published in IEEE Access, 2021(IF=3.37).
10. An article titled “Developing a Novel Hands-free Interaction Technique based on Nose and Teeth Movements for Using Mobile Devices” written by **Lt Col Muhammad Nazrul Islam** of CSE Department and co-author(s) is published in IEEE Access (IF=3.745).
11. An article titled “Land-Robot Technologies, the Integration of Cognitive Systems in Military and Defense: A Review” written by **Asst. Prof. Dr. Md. Akhtaruzzaman** and co-author(s) is accepted in the National Defense College E-Journal (NDC EJ).



12. An article titled “COVID-19 and Black Fungus: Analysis of Public Perceptions through Machine Learning” written by **Lec Nafiz Imtiaz Khan, Lt Col Nazrul Islam** of CSE Department and co-author(s) is accepted in a journal.
13. An article titled “A Systematic Review of the Digital Interventions for Fighting COVID-19: The Bangladesh Perspective” written by **Lec Nafiz Imtiaz Khan** of CSE Department and co-author(s) is accepted in a Q1 journal (IF=4.47).
14. An article titled “Towards Achieving A Delicate Blending between Rule-based Translator and Neural Machine Translator” written by **Asst. Prof Md Adnanul Islam** and co-author(s) is published in a Q1 journal (IF=5.60).
15. An article titled “An Enhanced Rule-based Translator: Can RBMT Outperform Data-Driven Translators?” written by Asst. Prof. Md Adnanul Islam of the CSE Department and co-author(s) is accepted in a Q2 journal (IF=2.20).

## Book Chapter(s):

1. **Lt Col Muhammad Nazrul Islam** and co-authors (2021). Exploring tree-based machine learning methods to predict autism spectrum disorder. In Neural Engineering Techniques for Autism Spectrum Disorder (pp. 165-183). Academic Press.

## Conference Papers:

1. **Prof. Dr. Md. Mahbubur Rahman** and others. (2022), “ Exploring Word2Vec Embedding for Sentiment Analysis of Bangla Raw and Randomized Text,” 3rd International Conference on Data Science and Applications, Jadavpur University, Kolkata, India.
2. **Prof. Dr. Md. Mahbubur Rahman** and others. (2022). “Network Intrusion detection using UNSW\_NB15 dataset: Stacking Machine learning based approach”, 2nd International Conference on Advancement in Electrical and Electronic Engineering (ICAEET 2022), Department of EEE, DUET.
3. **Lt Col Muhammad Nazrul Islam** and co-authors. (2022). Obesity and Mental Health during the COVID-19 Pandemic: Prediction and an Exploration of their Relationship. In proceedings of the International Conference on 4th Industrial Revolution and Beyond (IC4IR), Dhaka, Bangladesh.
4. **M. Akhtaruzzaman** and co-authors . (2022) A Comparative Analysis among Three Different Shortest Path-finding Algorithms, 3rd International Conference Of Emerging Technologies 2022, Belgaum, India.
5. **Lec Nafiz Imtiaz Khan, Lt Col Muhammad Nazrul Islam** and co-authors. (2022). Exploring Design Attributes and Development of an Acoustic VR Game to Improve Ethical Values of Visually Impaired People. In Proceedings of the IEEE 7th International Conference for Convergence in Technology (I2CT 2022), Pune, India,



6. **Lec M. M. Rushadul Mannan, Prof Dr. Md. Mahbubur Rahman** and co-authors. (2022). “An Approach Towards Video Captioning in Bengali”, International Conference on Artificial Intelligence and Machine Learning (IAIM-2022), Sathyabama Institute of Science and Technology, Chennai, India.
7. **Brigadier General Md Abdur Razzak** and co-authors. (2021). “Comparative Analysis of Thermal Hydraulic Parameters of AP-1000 and VVER-1200 Nuclear Reactor for Turbine Trip Concurrent with Anticipated Transient Without SCRAM (ATWS)”, International Conference on Automation, Control and Mechatronics for Industry 4.0 (ACMI), Rajshahi, Bangladesh.
8. **Prof. Dr. Md. Mahbubur Rahman** and others. (2021). “RSU-aided Mobility-aware Dynamic Resource Allocation for Vehicular Cloud Services,” In Proceedings of International Conference on Software Engineering & Computer Systems and International Conference on Computational Science and Information Management (ICSECS-ICOCSIM), Universiti Malaysia, Phang, Malaysia.
9. **Prof. Dr. Md. Mahbubur Rahman** and others. (2022). “Securing Multimedia Content Using Watermark and Digital Signature,” In Proceedings of 6th International Conference on Communication and Electronics Systems (ICCES), PPG Institute of Technology, Tamil Nadu, India.
10. **Prof. Dr. Md. Mahbubur Rahman** and others. (2022). “Functional Modification of Advanced Encryption Standard Algorithm by Perturbing the Diffusion and Confusion Properties”. In Proceedings of 5th International Conference on Electrical Engineering and Information & Communication Technology (ICEEICT), Military Institute of Science and Technology (MIST), Dhaka-1216, Bangladesh.
11. **Lt Col Muhammad Nazrul Islam** and co-authors. (2021). Development of a Predictive Analytic System for Chronic Kidney Disease using Ensemble-based Machine Learning. In proceedings of the 62th International Scientific Conference on Information Technology and Management Science of Riga Technical University (ITMS 2021), IEEE, Riga, Latvia.
12. **Lec Nafiz Imtiaz Khan, Lt Col Muhammad Nazrul Islam** and co-authors. (2021). An Efficient Transfer Learning Model for Predicting Forged (Handwritten) Signature. In proceedings of the 6th International Conference on Computer, Communication, Chemical, Material and Electronic Engineering (IC4ME2-2021), Rajshahi, Bangladesh.
13. **Lec Nafiz Imtiaz Khan, Lt Col Muhammad Nazrul Islam** and co-authors. (2021). Towards Developing a Mobile Application for Detecting Intoxicated People through Interactive UIs. In Proceedings of the 5th International Joint Conference on Advances in Computational Intelligence (IJCACI 2021), India, Springer.
14. **Lt Col Muhammad Nazrul Islam** and co-authors. (2021). Blockchain Implementations and Use Cases for Inhibiting COVID-19 Pandemic. In Proceedings of the 5th International Joint Conference on Advances in Computational Intelligence (IJCACI 2021), India, Springer.



15. **Lt Col Muhammad Nazrul Islam** and co-authors. (2021). Assessing Usability of Mobile Applications Developed for Autistic Users through Heuristic and Semiotic Evaluation. In Proceedings of the 5th International Joint Conference on Advances in Computational Intelligence (IJCACI 2021), India, Springer.
16. **Lt Col Muhammad Nazrul Islam** and co-authors. (2021). A Machine Learning Based Sign Language Interpretation System for Communication with Deaf-mute People. In Proceedings of the 21th International Conference on Human Computer Interaction (Interacción 2021), Málaga, Spain, ACM.
17. **Lec Nafiz Imtiaz Khan, Lt Col Muhammad Nazrul Islam** and co-authors, Design, Development and Evaluation of a Physical Exercise Monitoring and Managing System for Athletes, In 23rd International Conference on Information Integration and Web Intelligence (iiWAS2021), Linz, Austria.
18. **Lec Md Shadman Aadeeb, Asst. Prof. Dr. Nusrat Sharmin** and co-authors. (2021). Implementation of a GPS in the present battle tanks of Bangladesh. In IEEE Computer Society Bangladesh Chapter Winter Symposium (IEEE CS BDC WS), IEEE.
19. **Asst. Prof. Dr. Nusrat Sharmin** and co-authors. (2021). Development of a Modern Simulation Software and Analysis of its Performance Using a Swarm System Architecture Driven by Nature-Inspired Algorithms. In IEEE Computer Society Bangladesh Chapter Winter Symposium (IEEE CS BDC WS), IEEE.
20. **Asst. Prof. Dr. Nusrat Sharmin** and co-authors. A Deep Learning-Based Approach for Real-Time Driver Drowsiness Detection. In 5th International Conference on Electrical Engineering and Information & Communication Technology (ICEEICT), Dhaka, Bangladesh,, IEEE.
21. **Asst. Prof. Dr. Nusrat Sharmin** and co-authors. Development of a Modern Simulation Software and Analysis of its Performance Using a Swarm System Architecture Driven by Nature-Inspired Algorithms. In International Conference on Robotics, Automation, Artificial-intelligence and Internet-of-Things (RAAICON), Dhaka, Bangladesh, IEEE.
22. **Maj Md Mokhlesur Rahman** and co-authors.(2021, December). Automated Detection of Lung Cancer Using MRI Images. In 2021 3rd International Conference on Sustainable Technologies for Industry 4.0 (STI) (pp. 1-5). IEEE.
23. **Asst. Prof Sharifa Rania Mahmud, Lec Nafiz Imtiaz Khan** and co-authors, “Developing a Machine Learning Based Support System for Mitigating the Suppression Against Women and Children,” 5th International Conference on Electrical Engineering and Information & Communication Technology (ICEEICT), IEEE, Dhaka, Bangladesh, 2021.
24. **Asst Prof Nuzhat Tabassum**, “A Case Study on Information Fusion Modelling in Email Archives”, 4th IEEE International Conference on Telecommunications and Photonics (ICTP) 2021, December 22-24, 2021, Dhaka, Bangladesh.

25. **Lec Tasmiah Tamzid Anannya, Lt Col Muhammad Nazrul Islam** and co-authors, "Requirements Elicitation and Development of a Graveyard Management System in the Context of Bangladesh". In Proceedings of the International Conference on Science and Contemporary Technologies (ICSCT 2021), 05-07 Aug, 2021, Dhaka, Bangladesh, IEEE.
26. **Lec Tasmiah Tamzid Anannya, Lt Col Muhammad Nazrul Islam** and co-authors, "SeniorsAid: Requirements Elicitation and Development of a Mobile Application for Senior Citizens". In Proceedings of the International Conference on Big Data, IoT and Machine Learning (BIM 2021), 23 -25 Sep, 2021, Cox's Bazar, Bangladesh, Taylor and Francis.
27. **Maj Md Mahbubar Rahman, Lt Col Muhammad Nazrul Islam**, "Exploring the Performance of Ensemble Machine Learning Classifiers for Sentiment Analysis of COVID-19 Tweets". In Proceedings of Sentimental Analysis and Deep Learning. Advances in Intelligent Systems and Computing, vol 1408. June 2021, Springer, Singapore.
28. **Lt Col Muhammad Nazrul Islam, Nafiz Imtiaz Khan, Maj Md Mahbubar Rahman** and co-authors, "Sentiment Analysis of Bangladesh-specific COVID-19 Tweets using Deep Neural Network," 2021 62nd International Scientific Conference on Information Technology and Management Science of Riga Technical University (ITMS), 2021, pp. 1-6.
29. **Lec Nafiz Imtiaz Khan** and co-authors, "Prediction of Android Malicious Software using Boosting Algorithms" 4th International Conference on Emerging Technologies in Computing 2021. August 18-19, 2021 London, United Kingdom.
30. **Lec Tasfia Tasnim, Lec Nafiz Imtiaz Khan** and co-authors(2021). "A Framework to Detect and Prevent Cyberbullying from Social Media by Exploring Machine Learning Algorithms", 6th International Conference on Computer, Communication, Chemical, Materials and Electronic Engineering (IC4ME2) December 26-27, 2021, Rajshahi University, Rajshahi, Bangladesh.
31. **Lec Tasneem Mubashshira, Lec Nafiz Imtiaz Khan, Lt Col Muhammad Nazrul Islam** and co-authors (2021) "Towards Developing a Mobile Application for Detecting Intoxicated People through Interactive User Interfaces", 5th International Joint Conference on Advances in Computational Intelligence (IJCACI 2021) October 23-24, 2021, Jahangirnagar University, Dhaka.

# CSE GALLERY





*Honorable State Minister Mr. Zunaid Ahmed Palak is warmly greeted with a flower bouquet on the occasion of the Inauguration of the MIST Cyber Range*



*The Honorable State Minister is visiting "Phoenix 2.0" the Mars Rover that became Global Champion in University Rover Challenge in 2021*



*Demonstration of Cyber Attack and Cyber Defence in the newly inaugurated Cyber Range*



*The Honorable State Minister is delivering his speech as chief guest on the Inauguration Ceremony of MIST Cyber Range*



*Hands-on Faculty Development training program conducted by Department of CSE*



*Workshop on OBE organized by Dept of CSE*



*CSE Dept organized seminar on IOT in Defense Research and Development*



*CSE Dept organized seminar on IOT & Telecom Regulatory Environment*



*Workshop on Apps Development Program in collaboration with Robi Axiata Ltd*



*On-campus recruitment of NAZTECH*



*Farewell Ceremony of Brigadier General Touhidur*



*Farewell Ceremony of Lecturer Tarannum Zaki*





*Vibrant Faculty Members of Dept of CSE*



*Inter-University Programming Contest 2019 organized by Dept of CSE*



*Golden Jubilee Problem Solving Camp 2021 organized by MIST Computer Club*



*Seminar on Bangladesh IT Engineers Examination (ITEE) organized by Dept of CSE*



*Farewell Ceremony of Col Amirul Azim*



*Farewell Ceremony of Former HoD Brig Gen Sajjad Hossain*



*Farewell Ceremony of Former Senior Instructor  
Col Shajahan Majib*



*Meeting held with a2i Innovation Lab regarding collaboration  
research and development*



*Online Workshop on "Learning Machine Learning: the ML pipeline" by CSE Dept*



*Seminar on Internet of Things (IoT)*



*MoU signing ceremony with AFMC*



*Successful Conduction of AFMC Admission Test 2021*



*A team from the CSE Department of MIST Secured the 21st position in the MIST IUPC 2019*



*A team from CSE Department of MIST Secured the 2nd Runner Up position in TECHNOVATION 2018*



*A team from CSE Department of MIST Secured the 2nd Runner Up position in Hackathon 2017, SUST*



*Runners Up team in App Development Contest from CSE Department of MIST Receiving prize money in the IUT ICT FEST 2017*



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