

## **PRESS RELEASE**

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 (*corona virus*) effectively in a standard 12' x 16' room with a disinfection time of 2-3 minutes. The Robot provides a 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 Theatre, Office room, Class room, 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 system 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 system.

Chief Patron of this project was Maj Gen Md Wahid-Uz-Zaman, ndc, aowc, psc, te, the visionary commandant of Military Institute of Science & Technology. The development team was led by Capt Akib Zaman (4<sup>th</sup> Year, CSE). Team members were Shoeb Ahmed Tanjim (3<sup>rd</sup> Year, CSE), Shafayetul Islam (3<sup>rd</sup> Year, CSE), Shah Md Ahasan Siddique (3<sup>rd</sup> Year, CSE), Nafiz Imtiaz Khan (4<sup>th</sup> Year, CSE), Md Shadman Adeeb (4<sup>th</sup> Year, CSE), Riasat Haque (2<sup>nd</sup> Year, CSE), Md Rashid Ul Islam (1<sup>st</sup> Year, CSE) and M Rayhan Ferdous Faisal (1<sup>st</sup> Year, CSE).

The Development team has also expressed profound gratitude to Brig Gen Mohammad Sajjad Hossain, Head of the Department, Col Sidharth Malik, Senior Instructor and Col Shahjahan Majib, Senior Instructor from Department of Computer Science & Engineering for their constructive recommendation, professional guidance and whole-hearted supervision. Overall, the development team is indebted to the technical support of Computer Science & Engineering (CSE) Department throughout the project. The development team is eager and determined to work in more projects related with robotics in near future.