

UIU places 1st among Asian teams in University Rover Challenge 2023

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TELOS, a Mars rover prototype and ICARUS, the companion aerial subsystem, developed by the UIU Mars rover team, have recently secured first place in Asia in the University Rover Challenge 2023.

This is the second consecutive year UIU has become 1st among Asian teams in Universal Rover Challenge (URC), with their rover named MAVEN also ranking 1st in Asia in last year's URC. This year, the UIU team has also reached 9th overall out of 37 global finalists. Last year, they were 13th out of 36 global finalists.

The University Rover Challenge is an international rover showcase competition hosted by the Mars Society, a nonprofit organisation that encourages the exploration of Mars for research and development. This year, 104 teams from 15 different countries participated in the international competition, with the final round taking place at the Mars Desert Research Station in Hanksville, Utah, USA from June 1 to 3.

In the initial round, the team had to submit a compelling System Acceptance Review (SAR) video, which highlighted the rover's capabilities in performing various missions such as terrain traversal, equipment servicing, scientific exploration, and autonomous operations. Additionally, TELOS showcased its proficiency



in conducting scientific tests, and analysing soil and rock samples to detect signs of potential life.

The SAR video presented TELOS's core electronic and communication systems, as well as its robustness in testing and operation. TELOS attained a SAR score of 93.06 out of 100, securing its position among the 37 finalists from around the globe.

In the final round, participating teams were required to demonstrate their rover's prowess through four challenging missions in front of a jury of experts. These missions encompassed science exploration,

autonomous navigation, extreme delivery, and equipment servicing. The UIU team ended up placing 2nd worldwide in the 'Extreme Delivery' section of the competition, dethroned only by West Virginia University.

The UIU Mars rover team consists of over 25 students from different disciplines, including computer science, electrical science and business operating its various activities in space robotics since June 2021. The team members, divided into six sub-teams pertaining to different areas of rover designing, have hands-on experience in robotics and automation, as well

as fields such as 3D simulation, detection of life in space, drones, and autonomous navigation.

The team is directed by Akib Zaman, Lecturer at the Department of Computer Science & Engineering, United International University. The student team leader was Md Abid Hossain from EEE, UIU. The other members of the visiting team were Ahmed Junaed (CSE), T M Al Anam (CSE), Suraiya Afroz Maria (CSE), Sheikh Sakib Hossain (CSE), Shah Mehrab Hossain Fahim (CSE), Md Yasin (CSE), Abdullah Al Masud (CSE), Shorower Hossain (CSE), and Md Bodiuzzaman Shikder (EEE).

"This achievement is a source of immense pride for the team, as it demonstrates their ability to compete on a global stage and showcases the talent and potential that resides within their university and the entire Asian region," says Akib Zaman. According to him, the team hopes that this accomplishment will inspire future generations of students to pursue careers in STEM. "Hopefully, this will also instil in them the belief that they can achieve great things through dedication and hard work," adds Akib.

Five other universities from Bangladesh - BRAC, AUST, MIST, AIUB and BUET - also took part in this year's University Rover Challenge.

