



# Amir Hamza

Instructor

Dept of CSE, INTERNATIONAL STANDARD UNIVERSITY

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[creativeamir.com](http://creativeamir.com) | [Portfolio](#) | YouTube: [Creative Amir](#) | AWS Certificates: [Credly Badges](#)

## CAREER OBJECTIVE

Dedicated robotics and mechatronics-oriented academic professional with strong experience in teaching, competition robotics, autonomous system development, and IoT applications. Seeking appointment as Lecturer in the Department of Robotics and Mechatronics Engineering at Daffodil International University, with the aim of contributing to academic excellence through laboratory-based teaching, research, robotics competitions, and project supervision in robotics, control systems, and intelligent systems.

## EDUCATION

- **Bachelor of Science in Computer Science & Engineering (B.Sc. in CSE)**  
International Standard University, Dhaka, Bangladesh  
Result: **CGPA 3.44 out of 4.00** | Graduation Year: **2024**
- **Higher Secondary Certificate (HSC)**  
Shaheed Ramiz Uddin Cantonment College, Dhaka  
Result: **GPA 3.42 out of 5.00** | Passing Year: **2018** | Group: **Science**
- **Secondary School Certificate (SSC)**  
Tejgaon Model High School, Dhaka  
Result: **GPA 5.00 out of 5.00** | Passing Year: **2016** | Group: **Science**

## Professional Experience

### Instructor – Dept. of Computer Science & Engineering International Standard University (ISU)

Jan 2025 – Present

- Teaching robotics, embedded systems, and programming fundamentals
- Mentoring robotics competition teams (national and international)
- Supervising student research and final-year projects
- Developing laboratory manuals and hands-on robotics curricula

## **Administrative Officer – IQAC (Institutional Quality Assurance Cell)**

### **International Standard University**

*Apr 2025 – Present*

- Managing academic compliance documentation
- Coordinating departments for accreditation and evaluation
- Supporting audit and institutional development activities

## **Vice President & Director, IoT & Robotics Wing – ISU IT Club**

*Sep 2021 – Dec 2022*

- Led robotics & IoT innovation activities
- Organized workshops and competitions
- Supervised student research & development projects

## **PROJECTS & TECHNICAL CONTRIBUTIONS**

- **ROBO CONNECT Controller Hub (Android App – Published on Google Play Store)**  
Multi-robot control system supporting Bluetooth, Wi-Fi, and IoT communication
- **IoT Vehicle Tracking System with app (Published on Google Play Store)**  
Real-time GPS-based vehicle monitoring system with cloud dashboard
- **Mars Rover Prototype (Capstone Project)**  
Embedded control system, navigation logic, and modular mechanical design
- **Firefighting Robot** (BUET Robo Carnival 2023)
- **Soccer Robot System**
- **Surveillance Drones**
- **FPV Drone Systems**
- **River Cleaning Robot Prototype**
- **Smart Traffic Management System**

## **RESEARCH INTERESTS**

- Robotics & Mechatronics Engineering
- Autonomous Systems
- Underwater Robotics
- Control Systems
- Embedded & Real-Time Systems
- IoT Systems
- Artificial Intelligence in Robotics
- Smart System Design

## **TEACHING INTERESTS (RME-ORIENTED)**

- Robotics Engineering
- Mechatronics System Design
- Sensors & Actuators
- Industrial Automation

- Control Engineering
- Embedded Systems
- IoT Architecture
- Robotics Simulation
- AI-Based Robotics

## TRAINING & WORKSHOPS

- Drone & Robotics Workshop Instructor – North South University & ISU
- Trainer – ROBODEMY (National Robotics Education Platform)

## AWARDS & ACHIEVEMENTS

- 2nd Runner-Up – Firefighting Robot, BUET Robo Carnival 2023
- 1st Place – Drone Surveillance System, 40th National Science & Technology Week
- Multiple achievements in national competitions (BUET, UIU, AUST, BUBT)
- Academic content developer – Creative Amir YouTube Channel (Robotics & IoT)

## JUDGING & MENTORING

- Judge – National Robotics Championship (Feb 2025)
- Judge – Robotics Competition, Dhaka Residential Model College (May 2025)
- Judge – Robotics Competition, Notre Dame College (May 2025)
- Judge – Science Fair, Darland International School (2025)
- Mentor – ISU Falcon and Robo Nexus robotics teams
- Supervisor of Mars Rover and AI-based robotics projects

## CURRENT RESEARCH & DEVELOPMENT (ONGOING)

### Autonomous Underwater Vehicle (AUV) – RoboSub International Competition

- Designing and developing an autonomous underwater robot
- Working on propulsion system design and controller implementation
- Integrating mechanical and electrical systems
- Developing navigation logic, sensor interfacing, and mission planning
- Focus area: underwater robotics and control engineering

## CERTIFICATIONS & PROFESSIONAL DEVELOPMENT

- AWS Educate – Storage, Compute & Databases
- Robotics & Drone Workshop Certifications
- National Competition Certificates (BUET, AUST, UIU, BUBT etc.)

## SKILLS

### Robotics & Engineering

Embedded Systems, Control Systems, Mechatronic Design

## Programming

C, Python, Java, SQL

## IoT & Systems

Sensor Integration, Communication Protocols

## Leadership

Academic Supervision, Team Leadership, Event Coordination

## MEMBERSHIPS

- Active member of national robotics communities
- Mentor of university robotics teams

## PUBLICATIONS

- *Design and Implementation of a Modular, Cost-Effective Mars Rover Prototype for Simulated Planetary Exploration*  
Under Review – IEEE International Conference on Robotics, Automation, AI & IoT (4th Edition)

## ACADEMIC & DIGITAL CONTRIBUTIONS

- Educational robotics tutorials and technical demonstrations published on **Creative Amir (YouTube Channel)**
- Founder and contributor of [www.creativeamir.com](http://www.creativeamir.com) – a platform sharing robotics tutorials, IoT guides, and research-based articles
- Development of open educational robotics content for students and beginners

## REFERENCES

Available upon request.