Aditya Prakash Bhagchandani

Robotics & Automation Engineer — B.Sc. Graduate (Expected September 2025)

Berlin, Germany   +4917628864543   +201100013699 (WhatsApp only)
aditya.yuvadi@gmail.com   LinkedIn   GitHub   Portfolio

Summary

Robotics and Automation Engineering graduate (expected September 2025) with expertise in AI-driven automation, machine learning, and autonomous systems. Skilled in Python, machine-learning, CAD, and IoT integration, with hands-on experience in system design, simulation, and digital transformation. Seeking full-time roles to innovate solutions in robotics within collaborative, cutting-edge environments.

Education

B.Sc. in Robotics and Automation Engineering (Exchange Program)   *October 2023 – February 2025*
German International University (GIU) – Berlin Campus, Berlin, Germany

- Member of the Cyber-Physical Systems (CPS) Team, driving advanced automation projects
- Relevant Coursework: Industrial Robotics, Robot Kinematics, Control Systems, Networks, PLC, Project Management
- **B.Sc. Thesis**: Developed AI-driven model for road surface deterioration detection using ITS and IoT (Supervisor: Dr. Amr Talaat, Grade: A+)
- **Mechatronics Project**: Engineered maze-solving robot with overhead camera for real-time pathfinding
- Key Projects: Simulated 3RRR parallel robot; designed gearbox in SolidWorks; controlled 3 DOF robotic arm; managed workflows with JIRA
- GPA: 1.5 (German Scale, A- equivalent)

B.Sc. in Robotics and Automation Engineering   *September 2021 – Expected September 2025*
German International University (GIU) – Egypt Campus, Cairo, Egypt

- Relevant Coursework: Computer Science, Mechanics, Mathematics, Electronics, Software Engineering, Microcontrollers
- Key Projects: Material testing simulation (Ansys); Snake and Ladders game (C++); obstacle-avoidance RC car (Arduino); university portal (JavaScript, Node.js, PostgreSQL); 3-story elevator (ATmega32); hoverboard simulation (MATLAB)
- GPA: 2.06 (German Scale, B equivalent)

Professional Experience

Research Intern   *March 2025 – Present*
RPTU Rheinland-Pfälzische Technische Universität, Kaiserslautern, Germany

- Optimized machine learning models for ZEBRA project, enhancing Ground Penetrating Radar (GPR) dataset analysis
- Collaborated on AI-driven automation solutions, improving system integration and performance

Mechanical Team Leader   *January 2022 – October 2023*
Techademics Club, Cairo, Egypt

- Led design and development of robots for Metal Monster and Minesweeper competitions, securing top rankings
- Managed project timelines and budgets, improving resource efficiency by 20

Junior Teaching Assistant for Technical Drawing *February 2023 – June 2023*
German International University (GIU) – Egypt Campus, Cairo, Egypt

- Supported students with technical drawing tasks, boosting class performance by 10%
- Assisted in exam monitoring and curriculum delivery, enhancing academic outcomes

Key Projects

- **WhatsApp Automation**: Built Python-based tool for automated employee notifications, reducing manual effort by 30%
- **Company Bell Application**: Developed C# notification system for workplace communication
- **3D Printers & Laser Engraver**: Designed and constructed custom 3D printers and engravers, optimizing precision
- **University Portal**: Created multi-user portal with JavaScript, Node.js, and PostgreSQL, streamlining student access
- **Maze-Solving Robot**: Engineered autonomous robot using ROS and overhead camera for pathfinding

volunteering Events

Event Coordinator and Receptionist *March 2024 & March 2025*
Egypt Booth – ITB Berlin, Berlin, Germany

- Coordinated schedules for the Minister and managed booth operations, including IT support and inventory

Usher & Organizer *2023*
IEEE ITSS Conference Berlin, Berlin, Germany

- Facilitated logistics for 100+ attendees, ensuring seamless event execution

Organizing Member *2018 – 2023*
Indian Community Association in Egypt (ICAE), Cairo, Egypt

- Coordinated cultural events, engaging 150+ community members

Achievements & Certifications

- Ranked 2nd, Metal Monster 2023 – Techademics Club
- Ranked 16th, Minesweeper 2023 – Techademics Club
- Python, JavaScript, and Machine Learning Certification – Purple Tutor
- Tutored 15+ students, improving academic performance by 25

Technical Skills

- **Programming**: Python, C++, JavaScript, C#
- **Machine Learning**: PyTorch, Darknet, TensorFlow
- **Robotics & Automation**: ROS, Arduino IDE, PLC Fiddle, LTSpice
- **Simulation & Design**: MATLAB, Simulink, Simscape, SolidWorks, Ansys, CAD
- **Project Management**: JIRA, Agile Methodologies
- **Other**: Photo/Video Editing, Event Management, System Integration, Digital Transformation

Languages

English: Fluent   Hindi: Native   Arabic: Intermediate   German: Beginner (A2)