

RIJAS ALI

Mechatronics | Robotics Engineer

📍 Dubai | 📞 +971569582613 | ✉️ rijasalivr@gmail.com
LinkedIn: [linkedin.com/in/rijas-ali](https://www.linkedin.com/in/rijas-ali) | Portfolio: rijasali.com

PROFESSIONAL SUMMARY

Innovative Mechatronics Engineer with 2+ years of experience in product development, electronic systems, and team leadership. Proven expertise in embedded systems, Electronics and project management from concept to delivery. Demonstrated success in client collaboration, prototyping, and system optimization across multiple technical projects.

TECHNICAL SKILLS

Programming: Python, C/C++, Embedded Programming.

Software & Tools: ROS Noetic (Robot Operating System), Altium Designer, EasyEDA, Linux System, Fusion 360, OpenCV, Machine Learning, 3D Modeling, Fusion 360.

Hardware Expertise: Microcontrollers (Arduino, ESP), Raspberry Pi, Sensors & Actuators, Embedded System Development, PCB Prototyping, System Integration & Calibration, Control System Design, System Troubleshooting, PCB Design & routing, Industrial protocols: UDP, CAN, RS485, I2C, UART.

Project Management & Leadership: Research & Development, Project Management, Technical Training, Documentation, Problem Solving, Team Leadership.

PROFESSIONAL EXPERIENCE

Senior Electronics Engineer (July 2023 – Present)

BriteMinds, Dubai, UAE

- Collaborated with integrated engineering teams across mechanical, media, and computer disciplines to develop innovative automation systems.
- Managed and guided a technical team of 8 members and junior engineers, focusing on hands-on training and knowledge sharing to boost their expertise with emerging technologies and project delivery.
- Drove research projects from concept to reality, turning innovative ideas into practical electronic and mechatronic solutions that met client requirements.
- Developed detailed cost breakdowns and technical recommendations, helping clients find optimal solutions within their budget while maintaining high performance standards.
- Managed project timelines and resources across multiple complex projects, ensuring consistent on-time delivery.
- Designed and optimized electronic circuits with precise power calculations and control systems, ensuring maximum reliability and performance for the applications.
- Created precise control systems using various microcontrollers and hardware, focusing on reliability and ease of implementation.

Mechatronics Engineer (Dec 2022 – Jun 2023)

BriteMinds, Dubai, UAE

- Built complete mechatronic systems by combining mechanical parts, electronics, and control software into reliable working solutions.
- Worked closely with different engineering teams to make sure mechanical and electronic parts worked together perfectly.
- Fine-tuned sensor and actuator systems to make them 35% faster and more responsive, improving overall system performance.

Senior Robotics Technical Program Developer (July 2022 – Dec 2022)

Codde Robo Robotics, Kerala, India

- Promoted to Senior role, leading curriculum development and training program optimization.
- Mentored 10 junior trainers in advanced robotics and electronics concepts.
- Established comprehensive course materials and hands-on workshops, achieving 95% positive feedback.
- Developed innovative project-based learning modules, increasing student engagement by 40%.

Robotics Trainer (May 2022 – Jun 2022)

Codde Robo Robotics, Kerala, India

- Conducted specialized robotics and electronics training sessions for students, Mentored 200+ students.
- Implemented practical project-based assessments to enhance student learning outcomes.
- Maintained and calibrated laboratory equipment ensuring optimal performance.

EDUCATION

Bachelor of Technology in Mechatronics (2018 – 2022)

APJ Abul Kalam Technological University | CGPA- 7.92 / 10

Relevant Coursework:

- Control Systems & Automation: PID Controllers, System Modeling, and Feedback Control Systems.
- Electronics & Embedded Systems: Digital Electronics, Microprocessor Architecture, Signal Processing.
- Programming & Software: Embedded C, Python Programming.
- IoT Applications - Robotics Fundamentals: Kinematics, Robot Programming, Sensor Integration.

CERTIFICATIONS

- Machine Learning, Projects: Sale Prediction using Logistic Regression, Moving Object Detection, Face detection & Tracking, Face Recognition, Face Emotion Recognition etc.
- Advanced Python Programming
- ROS Noetic (Robotic Operating System) Certification
- Embedded System Design & IoT Certification.
- Professional Training in Robotics.
- Innovation Recognition - Kerala Development and Innovation Strategic Council.

ACHIEVEMENTS

- Promoted from Mechatronics Engineer to Senior Electronics Engineer within a short period, recognized for exceptional technical leadership and innovation capabilities.
- Successfully delivered major projects at UAE's premier tech events (GITEX, Arab Health, ADIPEC and COP28), earning client trust and repeat business.
- Selected among top 50 from 100,000+ participants in Kerala Government's Young Innovators Program (MOVEX project)
- Earned Employee of the Month recognition for delivering innovative technical solutions during critical project phases.

PERSONAL INFORMATION

- Nationality: Indian
- Driving License: Dubai License
- Languages: English, Malayalam, Hindi