Saad Imtiaz

Germany

saadimtiazsial@gmail.com

+4917685003873

linkedin.com/in/muhammadsaadbinimtiaz

Summary

Experienced Mechatronics Engineer with 5+ years in Embedded Systems, Control Systems, Mechatronic Systems, and Product Development. Collaborated with 200+ startups globally to refine products from prototype to production. Proficient in embedded systems, hardware development, systems integration, and project management. Driven by innovation and a desire to push boundaries. Demonstrated leadership skills, delivering high-quality results under tight deadlines. Strong focus on communication, problem-solving, and professional development. Adept at R&D, cross-functional collaboration, and stakeholder communication.

Experience

Chief Technology Officer

LOOFT Inc.

Jan 2022 - Present (1 year 5 months)

- Spearheaded the technology vision of a start-up as the Chief Technology Officer (CTO)
- Key member in the making the vision of the company.
- Led the development team and managed the entire product development lifecycle from prototyping to pre-product release
- Designed and iterated on prototypes, tested and validated the product, and implemented improvements based on feedback and testing results
- Created and executed the company's technology strategy, identifying areas for growth and improvement
- Recruited and managed a high-performing engineering team
- Designed and developed the embedded system and firmware, as well as the overall product's features , design (UI & UX) and CAD.
- Demonstrated strong leadership and management skills while collaborating with cross-functional marketing and development teams.
- Maintained up-to-date knowledge of industry trends and incorporated new technologies into product development strategies
- Utilized strategic thinking and problem-solving skills to identify and overcome technical challenges in product development.

Embedded Systems Engineer

2b AHEAD Ventures

Oct 2021 - Mar 2022 (6 months)

- Contracted as a Mechatronics Engineer for a startup to design and develop an IoT system from scratch.
- Designed and developed the electronics of the system and programmed the firmware for the device.
- Managed the entire hardware development process including PCB and APCB development.
- Conducted extensive functionality testing to ensure the system met all specifications and requirements.

- Coordinated with the team effectively, utilizing expertise in project management and knowledge of both mechanical and electrical systems.
- Delivered a high-quality product that met the startup's needs and requirements.

Lead R&D Embedded Systems Engineer

Air University Computing and Innovation Society (AUCIS)

Apr 2021 - Oct 2021 (7 months)

- Led a team of engineers in the development of a Smart Energy Monitoring System from concept to production
- Designed and developed the IoT architecture for the system
- Developed C++ firmware for the microcontroller (ESP32) and implemented FreeRTOS for the system
- Designed PCBs for IoT devices and developed cross-platform solutions for the IoT system
- Designed and developed CAD for the product using SOLIDWORKS
- Analyzed the embedded system design for optimal performance and tested the system to ensure it met all functional and performance requirements
- Managed the IoT systems, including data management and analysis of energy consumption
- Documented the IoT solutions and development process
- Gained hands-on experience in IoT development, product development lifecycle, and project management
- Contributed to the development of a IoT system that improved energy efficiency and productivity
- Worked at a Product Development Incubator facility, gaining experience in a dynamic and fast-paced environment.

Mechatronics & Embedded Systems Engineer

Freelancer.com

Jun 2017 - Oct 2021 (4 years 5 months)

- Collaborated with 200+ startups and companies all around the world to develop high-quality products from prototype to finished product, encompassing firmware and hardware design
- Delivered projects under strict timelines, achieving successful product launches and positive feedback from clients
- Managed projects effectively, increasing team productivity by 15% and reducing project turnaround time by 10%
- Contributed to the design and development of several patents related to new technologies and product designs
- Implemented process improvements and automation, achieving a 25% reduction in production costs for a client
- Presented innovative products and technologies at industry conferences and events
- Provided valuable consultation services to streamline production processes, reduce costs, and increase efficiency
- Maintained open communication with clients throughout the project lifecycle, ensuring their needs were met and issues were addressed in a timely manner

Mechatronics Engineer

Pakistan Aeronautical Complex Kamra

Jul 2020 - Feb 2021 (8 months)

- Worked as a key member of an aircraft manufacturing team
- Worked on cutting-edge unmanned aerial vehicles (UAVs)

- Collaborated with a team of experts on various control systems for the UAVs
- Designed, prototyped, and verified the thermomechanical subsystem of an airborne radar
- Created innovative cooling solutions for the radar using SOLIDWORKS
- Simulated cooling solutions using ANSYS for thermal and structural stress analysis
- Created and managed project documentation
- Interacted with other teams to help develop customized embedded solutions
- Worked closely with hardware and software teams to develop specifications
- Tested and remodelled hardware designs as needed
- Developed tools and techniques for testing and verification
- Contributed to the development of the most advanced and efficient UAVs possible.

Automation Engineer
Newby Rubber, Inc.
Feb 2020 - Apr 2020 (3 months)
- Automated a fully manual rubber moulding machine from concept to production
- Designed the ATmega2560 based custom embedded system hardware using Proteus and Eagle software
- Developed the firmware (C++) for the embedded system to control the machine
- Created an HMI (Human-Machine Interface) for the worker to interact with the machine
- Tested and verified the designed system to ensure it met all functional and performance requirements
- Managed the entire project from start to finish, including design, implementation, testing, and documentation
- Contributed to the development of an automated system that improved productivity and efficiency
- Worked as an Automation Engineer, gaining experience in designing, programming, and testing embedded systems
- Demonstrated expertise in project management, electronics design, and firmware development.

Engineer Intern
Pakistan Aeronautical Complex Kamra
Jun 2019 - Jul 2019 (2 months)
Hands on Experience on the CAD Software CATIA V5, learnt about
the design and production processes of various parts of aircrafts.

Student Intern
Pakistan Aeronautical Complex Kamra
Jun 2018 - Jul 2018 (2 months)
Learned about various CNC machines and production processes of aircrafts.

Education

Air University
Bachelor of Engineering - BE, Mechatronics, Robotics, and Automation Engineering
- Final Year Project (FYP)
Team Leader , Designed and Developed an Exoskeleton for Rehabilitation and Force Augmentation for Monoparesis Patients.

Licenses & Certifications

Python for Data Science and AI - IBM

Python for Data Science, AI & Development - IBM

IoT Foundations: Operating Systems - LinkedIn
AUNMWJVY7vzOmUaE9JltamP5-Y7P

Skills

DevOps • Scrum • Embedded C++ • STM32 • Object-Oriented Programming (OOP) • FreeRTOS • Linux • LabVIEW • Electronics • Mechatronics