

Saad Imtiaz, Mechatronics Engineer

Work Experience

Elektor International Media B.V Senior Engineer

JUL 2023 - PRESENT

- Leading the design, prototyping, and testing phases of electrical designs and electronics-related equipment.
- Developing embedded and electronics circuits and projects, including PCBs and firmware.
- Authored and edited articles for Elektor Magazine, covering electronics projects, emerging technologies, and new product reviews.
- Directed design projects, overseeing a team of engineers and fostering collaboration with the Elektor community, product team, and external partners.

LOOFT Inc. Chief Technology Officer & Co Founder

OCT 2021 - 2023


- Led the development team and spearheaded the technology vision for a startup focused on smart air conditioning with AI.
- Designed and developed embedded systems (C++), firmware, overall product features, UI/UX design, and CAD design.
- Managed the entire product development lifecycle, from prototyping to pre-product release.
- Implemented improvements based on feedback and testing results, achieving a 30% reduction in power consumption.
- Built and executed the company's technology strategy, identifying areas for growth and improvement.
- Recruited and managed a high-performing engineering team.
- Demonstrated strong leadership and management skills while collaborating with cross-functional teams.

2b AHEAD Ventures GmbH Embedded Systems Engineer

OCT 2021 - MAR 2022

- Designed & implemented embedded systems for technology start-ups (C++, FreeRTOS, ESP32).
- Managed full product lifecycle from concept to production (IoT architecture, PCBs, CAD).
- Optimized energy efficiency & ensured performance through analysis & testing.
- Gained expertise in project management, cross-functional collaboration, & IoT development.

Contact

 [saad-imtiaz](#)

saadimtiazsial@gmail.com

+49 176 8500 3873

+92 320 8817 733

Technical Skills

- Programming Languages: C++, Python, MATLAB, JS.
- Hardware Design: Altium, KiCAD, Proteus, LabVIEW, SOLIDWORKS, CATIA V5.
- Embedded Systems: Microcontrollers (ESP32, STM32, AVR, ARM), FreeRTOS, FPGAs & SBCs.
- Power Electronics: Experience with high-voltage systems, buck/boost converters, Motor Drivers, & Power Supplies.
- IoT: Cloud solutions (Azure, GCP, AWS IoT).
- Project Management: Agile methodologies, strong organizational skills

Certifications

- Python for Data Science and AI - IBM
- Python for Data Science, AI & Development - IBM

AUCIS Lead R&D Embedded Systems Engineer

FEB 2021 - OCT 2021

- Spearheaded the development of a Smart Energy Monitoring System, crafting its IoT architecture, and leading its journey from concept to production.
- Designed and optimized embedded systems, including firmware (C++/FreeRTOS), PCBs, and CAD models, ensuring high performance and functionality.
- Enhanced energy efficiency and gained comprehensive project management experience within a dynamic Product Development Incubator setting.

Pakistan Aeronautical Complex Mechatronics Engineer

JUL 2020 - FEB 2021

- Designed & verified thermomechanical subsystem for airborne radar on UAVs.
- Collaborated on control systems, created cooling solutions, power systems, designed and developed PCBs and Embedded Systems.
- Demonstrated expertise in project management, documentation, & cross-functional collaboration.

Freelancer Mechatronics & Embedded Systems Engineer

JUN 2017- OCT 2021

- Designed & developed embedded systems (ESP32, STM32, AVR) for diverse startup's and mid sized enterprises globally. Colaborated with more than 200 companies.
- Led projects from prototype to launch, and exceeding client expectations

Newby Rubber, Inc. Automation Engineer

FEB 2020 - APR 2020

- Automated rubber molding machine (ATmega2560) with HMI & C++ firmware.
- Improved productivity & efficiency, showcasing project management & technical skills.

Education

Air University, PK BE Mechatronics Engineering

SEP 2015- JUL 2020

- Relevant coursework: Circuit Design, Robotics, Power Electronics, Control Systems, Embedded Programming, Machine Design, Mechanics and IoT etc.
- Final Year Project (FYP) : Team Leader , Designed and Developed an Exoskeleton for Rehabilitation and Force Augmentation for Monoparesis Patients.

Publication

- [Design of Portable Exoskeleton Forearm for Rehabilitation of Monoparesis Patients Using Tendon Flexion Sensing Mechanism for Health Care Applications](#)

Impact Factor : 2.47 | Electronics
Journal | MDPI · May 26, 2021