

Erfan Mahmud Tushar

Embedded Systems Engineer

Fueled by my curiosity, I find solace in the complexities of circuits and connections. Challenges drive discovery, my journey bridges the gap between the unseen and the known for the betterment of mankind.

erfanmahmud642@gmail.com
+8809696799745
Dhaka, Bangladesh
www.erfanmahmud.com/
linkedin.com/in/erfanmahmud6
github.com/TheSnowFall

WORK EXPERIENCE

Embedded Systems Engineer
Smart Lifestyle Australia (Remote)

08/2023 - 08/2024 — *16 Fastline Road Truganina VIC 3029, Australia*

https://smartlifestyleaustralia.com.au/

Achievements/Tasks

- Developed hardware backbone for docking device-server integration in the SLA Home project
- Developed multiple Smart home appliances for SLA
- Designing circuit boards
- Developing firmware and hardware according to the FCC, SAA, SSA regulation

Senior Embedded Systems Developer
Padma Smart Technology Ltd.

09/2022 - 08/2023 — *114, Kazi Nazrul Islam Avenue, Banglamotor Dhaka, Bangladesh, 1000*

https://padmatechnology.com/

Achievements/Tasks

- Firmware development for Smart Electric Meter
- PCB design, Testing & Product Sourcing
- Chirpstack LoRa server management

IoT & Embedded systems developer
Padma Smart Technology Ltd.

07/2020 - 10/2022 — *114, Kazi Nazrul Islam Avenue, Banglamotor Dhaka, Bangladesh, 1000*

https://padmatechnology.com/

Achievements/Tasks

- Maintaining Electronic utility meters (Water & Electric), LoRa gateways and LoRaWAN servers.
- Maintaining LoRaWAN connectivity across Zanzibar Island, Tanzania for Smart Water Metering
- Technical Support for Chittagong WASA Smart AMR meter project

IoT Engineer
CPSD Technologies Ltd.

11/2019 - 06/2020 — *9/A Dhanmondi, 1205 Dhaka , Bangladesh*

https://cpsdbd.com/

Achievements/Tasks

- Designing, developing & testing IoT Devices for Smart Home through simulation & debugging
- Developing IR cube for controlling home appliances
- Developing Wi-Fi controlled gang switches

EDUCATION

MSc. In Satellite Communication Engineering
Bangabandhu Sheikh Mujibur Rahman Aviation and Aerospace University

2022 - Present — *Tejgaon (Dhaka Campus) Old Airport, 1215 Dhaka , Bangladesh*

Courses

- Satellite Communication Engineering & Remote Sensing

B.Sc in Electrical & Electronic Engineering
Mymensingh Engineering College

2013 - 2017 — *Khagdahar, Mymensingh Sadar, 2200 Mymensingh, Bangladesh*

SKILLS

AVR · ARM · Xtensa · RISC-V · C programming · RTOS · C++ · Wi-Fi · Bluetooth · Ethernet · GSM/GPRS/EDGE · TCP/UDP · LoRa · PCB Designing · Agile · HSPA · LTE

NOTABLE PERSONAL PROJECTS

Automated Smart Fisheries (04/2024 - Present)

- Developed a wireless Mesh gateway, implementing provisioning, cloud integration, and a sensor-based aquaculture monitoring system for optimal fish breeding.

DhumketuThrust-X - Mission control & Thurst Vector Controller (06/2022 - 03/2023)

- Designed embedded systems for crafts, conducted rigorous PCB design and testing, and led firmware development for specialized applications

ACHIEVEMENTS

Rocketry innovation Challenge-2023 (2023)

Organized & Hosted by by Bangabandhu Sheikh Mujibur Rahman Aviation and Aerospace University & ICT Ministry Bangladesh