

## SUMMARY

A software engineer passionate about IoT, Generative AI, Embedded Systems and Web Applications. I thrive in the dynamic world of startups and love challenging myself in hackathons.

## SKILLS

**Programming Languages & Frameworks** - C/C++, Python, JavaScript, Django, Flask, FastAPI, Bootstrap, React

**API & Protocols** - REST, Web Socket, DRF, Django Channels, Swagger, OpenAPI, MQTT, LoRaWAN, BLE

**Architecture** - Clean Architecture, Micro-service Architecture, Event-driven Architecture

**Databases** - MySQL, Postgres, BigchainDB, Redis, PipelineDB,

**Cloud Computing** - Docker, AWS (EC2 Instance, RDS, Route 53, VPC, S3)

**Microcontrollers/SoC** - ESP8266, ESP32, STM32, MSP430

**Management** - Team Leadership, Agile & Scrum Methodologies, Project Management

## WORK EXPERIENCE

**Freelance (Remote, 5-10 hrs/week)** 2022-09 - Present

**Recessd, ON, Canada**

- Maintain and improve the Building Automation System.
- Lead weekly team meetings, refine backlog and plan sprints.

**Research Assistant** 2023-06 - 2023-08

**Tampere University, Finland**

- Enhancing predictive maintenance with Generative AI.
- Harnessing the Power of GPT-4 API for Interactive IoT Platforms.

**Software Developer (Remote)** 2022-05 - 2022-09

**EventMobi, ON, Canada**

- Made significant Improvements to the authentication and authorization processes in EventMobi software.

**Lead Python Developer (Remote)** 2022-01 - 2022-04

**SimplifyVMS, NJ, United States**

- Led a team in building a prototype of an application for developing VMS solutions dynamically.

**Lead Python Developer (Remote)** 2021-10 - 2021-12

**Merit Incentives, Dubai, UAE**

- Transformed team culture by introducing standard coding styles and practices, git branching model, test driven development and efficient peer reviews.

**Python Developer (Freelancer)** 2018-04 - 2021-08

**Freelance**

- Developed Building Control System for a start-up in Canada (Recessd Automation). Handled everything from embedded systems to backend and frontend development.

**Software Engineer** 2016-12 - 2021-03

**Tekfocal, Lahore, Pakistan**

- Designed and developed IoT solutions i.e. Warehouse Asset Tracking System and Fleet Management System. Was responsible for developing backend services and device integration modules.

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## EDUCATION

Master's Degree in Information Technology (Embedded System) 2022-09 - Present

**Tampere University**

Tampere, Finland

B.Sc. Electrical Engineering 2012-09 - 2016-08

**University of Engineering and Technology**

Lahore, Pakistan

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## LANGUAGES

Urdu - Mother tongue

English - IELTS: C1

Finnish - A2.2 (Working towards B1)

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## VOLUNTEER EXPERIENCE

Participated in Deep Dive, Dash Hack and Junction 2023 hackathons. Winner of Dash Hack.

Volunteered for Slush 2023 in Cloakroom team.

Actively involved in the events of organizations/guilds at the university (TiTe, INTO).

Served as an International Student Tutor for INTO in Spring & Autumn 2023.

Serving as an International Student Tutor for TiTe in academic year 2023 - 2024.

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## AWARDS

Tampere University global student award for academic excellence 2023-2024

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## HOBBIES and INTERESTs

Books reading, Movies & Documentaries, Chess, Hiking, Travelling & Camping.