

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.

WORK EXPERIENCE

Entrepreneur 2022-09 - Present

Tampere, Finland

- Exploring various start-up ideas to identify product-market fit.
- Built an AI agent for IoT systems.
- Built an AI agent for digital marketing.
- Development of a Building Automation System.

Research Assistant 2023-06 - 2023-08

Tampere University, Finland

- Enhancing predictive maintenance with Generative AI.
- Harnessing the Power of GPT-4 LLM 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. 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.
-

EDUCATION

Master's Degree in Information Technology (Embedded System) 2022-09 - 2024-12

Tampere University

Tampere, Finland

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

University of Engineering and Technology

Lahore, Pakistan

SKILLS

Generative AI - LLMs, RAG, Function calling, Fine tuning, Prompt Engineering, Agentic AI

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

LANGUAGES

Urdu - Mother tongue

English - IELTS: C1

Finnish - B1

VOLUNTEER EXPERIENCE

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

Volunteered for Slush 2023 in Cloakroom team and Slush 2024 in Food Experience 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.

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

AWARDS

Tampere University global student award for academic excellence 2023-2024

HOBBIES and INTERESTS

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