MD AL-NAIM

+358 44 975 8920
mail@alnaim.dev
linkedin.com/in/md-al-naim/
alnaim.dev
linkedin.com/in/md-al-naim/

EDUCATION

Savonia University of Applied Sciences – Kuopio, Finland

September 2023 – Present

Bachelor of Engineering, Information Technology (Internet of Things)

Kuopio

BRAC University – Dhaka, Bangladesh

January 2021 - August 2023

Bachelor of Science in Computer Science & Engineering (Completed 45 Credits)

Dhaka

TECHNICAL SKILLS

Programming Languages: Python, C, JavaScript, SQL (MySQL)

Frameworks & Libraries: ROS, Flask, Flet, scikit-learn, XGBoost, SHAP, pandas, NumPy, Matplotlib **Tools & Technologies:** Raspberry Pi, Arduino, UWB (liwari), Nokia 5G, REST APIs, TCP/Socket,

Git/GitHub, Docker, Linux, HTML5/Canvas

WORK EXPERIENCE

Project Worker, IoT & Robotics

May - August 2025

DigiCenter North Savo (Savonia UAS)

Kuopio

- Achieved ±25 cm accurate autonomous navigation with 10 Hz UWB + odometry fusion, ensuring smooth goal convergence in real-world trials.
- Delivered a live operator dashboard (Flask + Canvas) showing robot pose, path, and telemetry.
- Integrated AI obstacle detection over Nokia 5G with safe TCP pause/resume controls.
- Reduced operator workload and improved navigation reliability through automation.

PROJECTS

UWB Indoor Autonomous Navigation — Flagship

Designed a **LiDAR-free navigation system** using floorplan A* pathfinding + Pure-Pursuit, achieving **reliable indoor robot navigation at 10 Hz** with web-based monitoring.

Tech: Python, ROS, Flask, UWB API, Odometry, TCP/Socket, Nokia 5G

Predicting Telecom Customer Churn with Explainable Al

Built an **explainable churn prediction model** (XGBoost, AUC \approx 0.93) with SHAP insights, enabling targeted retention strategies and ROI simulations for telecom businesses.

Tech: Python, scikit-learn, XGBoost, SHAP, pandas, NumPy, Matplotlib

Recipe Studio — Local Al Recipe Generator (Flet + Ollama)

Developed a **desktop app that generates recipes 2–3× faster than manual search** using local Al (Ollama). Designed a distraction-free UI with robust parsing and error recovery.

Tech: Python, Flet, Ollama, JSON parsing/repair, UI/UX

EXTRACURRICULAR ACTIVITIES

Smart Agriculture Prototyping: IoT sensor nodes (DHT22, soil moisture) with basic cloud dashboards.

Tech Demos & Portfolio: Showcase robotics, AI, and IoT work through **demo projects and write-ups on my personal website** (due to NDA restrictions, source code is not public). Currently analysing the **SWaT** (**Secure Water Treatment**) **dataset** for anomaly detection research.

LANGUAGES

English: Fluent (C2) Finnish: Intermediate (A2) Bangla: Native

VOLUNTEERING

Onboarded international students to Savonia IoT labs (Python/Arduino basics, sensor wiring).

Ran community mini sessions on Python scripting and Arduino fundamentals.

References available upon request