

WORK EXPERIENCE

- **Digikala – Automation & Robotics Team — Software Engineer, Tech Lead** **2022–Present**
 - ScopeLed embedded/IoT system design for warehouse automation, focusing on real-time MQTT comms, OTA devices, and cost-efficient hardware.
 - Wheel SorterHigh-speed sorter with CAN-bus motor drivers, MQTT server integration, and barcode vision – improved throughput and reduced manual handling. - [more detail](#)
 - Put-to-Light v1AVR-based CAN-bus nodes with buttons/lights (OTA-enabled) – improved picking accuracy for new operators. - [more detail](#)
 - Put-to-Light v2ESP32 + LED strip redesign – reduced sorting time per item from 6.0s to 5.1s and lowered hardware cost by ~30%. - [more detail](#)
 - Smart ScaleWi-Fi-enabled scale (0.1–50 kg) with load cell + ESP32 – automated weight capture into SuperNova, reducing operator error. - [more detail](#)
 - Noise DetectorSound-level monitoring device for public spaces – enabled proactive environment management.
- **Basir Andishan Bina Tadbir (BABT) — Embedded Software Engineer** **2021–2022**
 - Multifunctional Vehicle TrackerDeveloped cost-efficient tracker on MediaTek MT2503 (GSM+GNSS) – enabled fleet monitoring under vendor limitations. - [more detail](#)
- **Andishe Fartak AmirKabir (Atrovan) — Embedded Developer** **2018–2019**
 - Indoor IR ControllerSTM32F1 firmware for IR learn/regenerate with ESP8266 connectivity – consolidated multiple remotes into a smart-home device. - [demo video](#)

EDUCATION

- Amirkabir University of Technology** (QS Global World Ranking) Tehran, Iran
M.S. in Electrical Engineering – Digital Electronics GPA: 17.0/20.0 2018–2021
 - Thesis: “Analysis of Data Received from Vehicles for Driver Behavior Profiling on the Cloud” –**Supervisor:** Dr. Seyed Ahmad Motamedi - [Blog summary](#)
- K. N. Toosi University of Technology** (QS WUR By Subject Ranking) Tehran, Iran
B.S. in Electrical Engineering – Electronics GPA: 16.25/20.0 2014–2018
Last two years GPA: 17.18/20.0
 - Thesis: “Implementation of Cloud Switches with Power, Temperature, and Humidity Measurement via MQTT” –**Supervisor:** Dr. Amir Mousavinia - [Blog summary](#)

SKILLS

- **Embedded & IoT Development:**

ESP32 (ESP-IDF, FreeRTOS), STM32 (CubeMX/CubeIDE, FreeRTOS), MediaTek (Nucleus RTOS), Quectel (OpenCPU), AiThinker (A9 SDK)

- **Backend Development:**

Django, FastAPI, Celery, RabbitMQ, Redis, SQL/NoSQL

- **Frontend Development:**

React, HTML5, CSS3, JavaScript

- **DevOps & Tools:**

Docker, Git, Linux, Jira, Adobe Photoshop, ChatGPT