Miradil Zeynalli

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EDUCATION

- **Lund University –** Lund, Sweden **(2022 – 2025)**
  MS in Embedded Electrical Engineering
- **ADA University –** Baku, Azerbaijan **(2015 – 2019)**
  BS in Computer Engineering
  GPA: 3.91/4.0 *(Summa Cum Laude Latin Honor)*
- **Koc University –** Istanbul, Turkey **(2017)**
  Erasmus Exchange Program, Electrical Engineering
  GPA: 3.89/4.0

EXPERIENCE

Sigma Connectivity Engineering, Lund, Sweden
Aug 2024 – Present
Consultant, Embedded Engineer

- Developed system and designed daemon to increase power efficiency to save more power without affecting the currently active system (Axis Communications)
- Working on different projects to improve portfolio for future assignments.

Axis Communications, Lund, Sweden
Mar 2023 – May 2024
Part-Time, Platform Security Engineer

- Validating bootloader images and handling fault cases.
- Getting into kernel level functions and handling memory access.
- Writing unit tests for added functions to ensure stability and security.
- Working with secure peripherals for different chip sets.

Starex, Baku, Azerbaijan
Jun 2021 – Aug 2022
Lead Python Django Developer

- Integrated payment system for increasing balance.
- Configured ELK + Filebeat stack on docker for logging.
- Optimized API endpoints and views by using URL expressions and grouping by apps.
- Wrote periodic tasks for celery and Django commands for single use feature/bugfixes.
- Documented and wrote test units for project, thus dramatically decreasing total count of bugs.

Sumaks Technologies, Baku, Azerbaijan
Nov 2017 – June 2021
Senior Embedded Software Engineer

- Worked on developing library for sensors and modules.
- Updated old codes to more optimal and secure versions.
- Researched solutions to reduce overall cost of project, including OTA, MQTT, LoRaWAN.

TECHNICAL SKILLS

C, C++, Python, STM32, ATmega, Teensy, LinkitOne, Raspberry Pi, BeagleBone Black, Bare Metal Development, Linux, Debian, FreeRTOS, OP-TEE OS, Git, GitHub, Gitlab, Bitbucket, Gerrit, VHDL, SystemVerilog, Cadence, AWS, Docker, Unity Test Framework, Unittest, Pytest, PL/SQL, PostgreSQL, MongoDB, Redis, Django, DRF, FastAPI

PROJECTS

Amazon Analytics Dashboard **Feb – May 2022**
RainForest Life Ltd/Senior Backend Developer

- Optimized the speed of Django ORM generated SQLs, reducing from 3+ minutes of execution to ~3 seconds.
- Reduced SQL queries and minimized it by using advanced SQL functions and handling it in Django ORM
- Handled high traffic APIs and background tasks, increasing stability and API respond time

Gas Station Automation **Sep – Dec 2021**
Maenken Systems/Remote, Freelancer

- Worked with C++ sockets for communication with devices.
- Used third-party JSON library to manage all configurations and to handle updates from the web.

Kibrit 3G **Mar 2020 – May 2021**
Sumaks Technologies

- Constructed star network of sensors with gateway as host.
- Developed low-power nodes with a lifetime of 3 and 9 months.
- Used LoRa technology for communication between nodes and gateway and 3G for internet connection.
- Created Python and bash scripts to run Raspberry Pi gateway as receiver and create hotspot for IP cameras.

AWARDS/CERTIFICATES

- Qiskit Global Summer School 2020
- AquaHack (2020) – 2nd place
- CanSat Azerbaijan (2019) – 1st place
- Republican Olympiad in Informatics (2018) – 2nd place
- ACM Sub-Regionals (Georgia, 2018) – 2nd place
- World School Chess Championship (2015) – 1st place

ADDITIONAL INFORMATION

Languages: Azerbaijani, English**,** Russian, Turkish

Interests: Chess, Reading, Movies, Quantum Computing, ML

Publications:

- Transformation, Analysis and Visualization of Distributed Temperature Sensing Data generated by Oil Wells | IEEE Conference Publication | IEEE Xplore
- Embedded Solutions for Flexible and Low Latency Power Control Unit | LUP Student Papers