Dániel **Arany**

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Freshly graduated embedded software engineer with 3 years of part-time experience is looking for a full-time job.

Education

Master of Science in Electrical Engineering — *2022 - 2024*
Budapest University of Technology and Economics — *Budapest*

Specialization:
- Computer-Based Systems
- FPGA-Based Systems

Bachelors of Science in Electrical Engineering — *2018 - 2022*
Budapest University of Technology and Economics — *Budapest*

Specialization:
- Embedded and Control Systems

Professional Experience

Junior Software Engineer — *2022 - Present*
Flex — *Budapest*
- Implement features in an embedded project using yocto.
- Create patches for external open-source tools.
- Suggested and implemented a firmware component version handler tool in C, that can be utilized through multiple projects.

OpenBMC | Yocto Project | C | C++ | BASH | CMake

Software Developer Trainee — *2021 - 2022*
Flex — *Budapest*
- Assist the Firmware Team by writing low-level sofware features and unit tests.
- Implement more complex embedded software solutions and write documentation.

C | Aurix | Python | Makefile

Student Council Representative — *2020 - 2021*
Budapest University of Technology and Economics — *Budapest*
- Communicate with students via email and advising them about university policy.
- Represent student interests at various meetings.

Projects

Multicore Rust on STM32H7 microcontroller — *2023*
- A software framework that enables the utilization of both cores of an STM32H745 microcontroller
- Provides examples of the two cores communicating and cooperating
- A dual-core demo application using ethernet and analog interfaces

Firmware Update Software for AURIX TriCore Microcontroller — *2021*
- A secondary bootloader for Infineon Aurix microcontroller
- Implements Software Over The Air by receiving the new firmware image via TFTP
- Activates the new image by handling the Aurix security features

Title
- Designed a custom PCB that connects an ESP32 and a BeagleBone Black via multiple interfaces
- The main module connects to ESP8266 nodes that can use sensors to monitor the environment

Skills

Languages	English (C1) | Hungarian (native)
Programming	C | C++ | Rust | Python | BASH | Robot Framework | Matlab | Verilog
Development	GCC/G++ | Makefile | CMake | Visual Studio | VSCode | Linux kernel | OpenBMC | Petalinux
Other	Git | Linux usage | Yocto Project | KiCAD | JIRA | Confluence