Dániel **Arany**

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

Education

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

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

Bachelor 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 advise 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
- Contains a dual-core demo application using ethernet and analog interfaces

Neural Network Evaluation on Xilinx SoC — *2022*

- Run pre-trained neural networks to perform facial recognition on a Xilinx evaluation board using Petalinux
- Use gstreamer to preprocess images and handle video feeds

Firmware Update Software for AURIX TriCore Microcontroller — *2021*

- A secondary bootloader for an 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

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