

# Mauri Mustonen

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## EDUCATION

- Tampere University of Technology**, Tampere, Finland 2016 – 2018
- M.Sc. in Software Engineering with Distinction
    - Cumulative GPA: 4.52 / 5.0
- Karelia University of Applied Sciences**, Joensuu, Finland 2012 – 2016
- Information Engineer in Software
    - Cumulative GPA: 4.50 / 5.00
- Vocational School Avartum Oy**, Joensuu, Finland 2010 – 2019
- Vocational Qualification in Business and Administration
- Vocational School Peltola**, Joensuu, Finland 2004 – 2007
- Electronics Technician

## EXPERIENCE

- Advaun Ltd**, Espoo, Finland 2021 – Present
- Software Consultant and CTO
    - CTO and co-founder.
    - Embedded and full-stack web software consultant.
- Lumitum Ltd**, Espoo, Finland 2020 – Present
- Software Consultant and CEO
    - CEO and co-founder.
    - Embedded and full-stack web software consultant.
- Tampere University**, Tampere, Finland 2020 – 2021
- Researcher in Parallel Computing and Compilers
    - Researching and improving an open source OpenCL implementation PoCL.
    - Researching and contributing to LLVM compiler auto vectorization optimizations.
    - Working with LLVM software pipeliner to exploit ILP of VLIW architectures.
- Wapice Ltd**, Tampere, Finland 2019 – 2020
- Embedded Software Developer
    - Embedded development with CMake, C and C++ up to C++17 standard.
    - Xilinx SDK and tools e.g. Vivado.
    - Real time OS, ARMv7 architecture and driver development for FPGA custom hardware.
- Alsus Ltd**, Tampere, Finland 2017 – 2019
- Full-Stack Web Developer
    - Web development (e.g Ruby on Rails, AngularJS).
    - Distributed system architect and developer (e.g. Linux, C, Ruby, CMake, AMQP, Redis).
    - Writing Ruby native extensions to C language.
    - Contributing to open source (e.g. Ruby on Rails, libIEC6850).
- Arestech Ltd**, Joensuu, Finland 2016 – 2020
- Entrepreneur and Shareholder
    - Responsible for customer relationships and meetings in Pirkanmaa region.
    - Embedded software design and developer (e.g. AVR, Linux, C/C++, Python).
    - Working as a software consultant.
- Asmeco**, Joensuu, Finland 2015 – 2017
- Entrepreneur and Owner
    - Production management software for Puupietari Oy done with Django/Python and AngularJS with integration to Lemonsoft ERP.
    - Embedded development using Python and C/C++ (e.g. AVR, Arduino, Raspberry Pi).
    - Maintenance and development of Kirpputorivaraus software for flea market management (e.g. Knockout, JQuery, PHP).
    - Kirpputorivaraus integration to Tehden Oy cloud based point of sale.

- Electronics Technician
  - Fixing and taking care of the electrical equipment.

**LANGUAGES**

- Finnish: Native language.
- English: Proficiency (speaking, reading, writing).

**SKILLS**

- AMQP and RabbitMQ,
- Altera Cyclone FPGA,
- Back-end (Ruby on Rails, Django, Rust),
- C/C++,
- Rust,
- CMake,
- CPU and VLIW Architectures,
- Databases (PostgreSQL, MySQL, Redis),
- Docker and Containers,
- Embedded (ARMv7, AVR, Linux),
- Front-end (AngularJS, React, JQuery),
- HTML5, (S)CSS, SASS,
- Java,
- JavaScript,
- LLVM Compiler Optimizations and Back End,
- Linux Kernel,
- Linux Server Administration,
- OpenCL Parallel Programming,
- Python,
- Ruby,
- Software Integrations (SOAP, REST),
- VHDL,
- Windows, Linux,
- Xilinx SDK.

**INTERESTS**

Bicycling, Geocaching, Programming, Electronics, Books