

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

- Tampere University**, Tampere, Finland 2020 – Present
- 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.
- Lumitum Ltd**, Tampere, Finland 2020 – Present
- Software Consultant and CEO
 - CEO and co-founder.
 - Embedded and web software consultant.
- 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.
- North Karelia Brigade**, Joensuu, Finland 2006 – 2007
- 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 and Django),
- C/C++,
- CMake,
- CPU and VLIW Architectures,
- Databases (PostgreSQL, MySQL, Redis),
- Docker and Containers,
- Embedded (ARMv7, AVR, Raspberry Pi),
- Front-end (AngularJS, React),
- 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