# **Mauri Mustonen**

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EDUCATION	<ul> <li>Tampere University of Technology, Tampere, Finland</li> <li>■ M.Sc. in Software Engineering with Distinction</li> <li>• Cumulative GPA: 4.52 / 5.0</li> </ul>	2016 – 2018
	<ul> <li>Karelia University of Applied Sciences, Joensuu, Finland</li> <li>Information Engineer in Software</li> <li>Cumulative GPA: 4.50 / 5.00</li> </ul>	2012 – 2016
	<ul><li>Vocational School Avartum Oy, Joensuu, Finland</li><li>Vocational Qualification in Business and Administration</li></ul>	2010 – 2019
	Vocational School Peltola, Joensuu, Finland  Electronics Technician	2004 – 2007
EXPERIENCE	<ul> <li>Advaun Ltd, Espoo, Finland</li> <li>Software Consultant and CTO</li> <li>CTO and co-founder.</li> <li>Embedded and full-stack web software consultant.</li> </ul>	2021 – Present
	<ul> <li>Lumitum Ltd, Espoo, Finland</li> <li>Software Consultant and CEO</li> <li>CEO and co-founder.</li> </ul>	2020 – Present
	<ul> <li>Embedded and full-stack web software consultant.</li> <li>Tampere University, Tampere, Finland</li> <li>Researcher in Parallel Computing and Compilers</li> <li>Researching and improving an open source OpenCL implementation PoCL.</li> <li>Researching and contributing to LLVM compiler auto vectorization optimizations.</li> <li>Working with LLVM software pipeliner to exploit ILP of VLIW architectures.</li> </ul>	2020 – 2021
	<ul> <li>Wapice Ltd, Tampere, Finland</li> <li>Embedded Software Developer</li> <li>Embedded development with CMake, C and C++ up to C++17 standard.</li> <li>Xillinx SDK and tools e.g. Vivado.</li> <li>Real time OS, ARMv7 architecture and driver development for FPGA custom hardware.</li> </ul>	2019 – 2020
	<ul> <li>Alsus Ltd, Tampere, Finland</li> <li>Full-Stack Web Developer</li> <li>Web development (e.g Ruby on Rails, AngularJS).</li> <li>Distributed system architect and developer (e.g. Linux, C, Ruby, CMake, AMQP, Redis).</li> <li>Writing Ruby native extensions to C language.</li> <li>Contributing to open source (e.g. Ruby on Rails, libIEC6850).</li> </ul>	2017 – 2019
	<ul> <li>Arestech Ltd, Joensuu, Finland</li> <li>Entrepreneur and Shareholder</li> <li>Responsible for customer relationships and meetings in Pirkanmaa region.</li> <li>Embedded software design and developer (e.g. AVR, Linux, C/C++, Python).</li> <li>Working as a software consultant.</li> </ul>	2016 – 2020
	<ul> <li>Asmeco, Joensuu, Finland</li> <li>Entrepreneur and Owner</li> <li>Production management software for Puupietari Oy done with Django/Python and AngularJS with integration to Lemonsoft ERP.</li> <li>Embedded development using Python and C/C++ (e.g. AVR, Arduino, Raspberry Pi).</li> <li>Maintenance and development of Kirpputorivaraus software for flea market management (e.g. Knockout, JQuery, PHP).</li> <li>Kirpputorivaraus integration to Tehden Oy cloud based point of sale.</li> </ul>	2015 – 2017

### North Karelia Brigade, Joensuu, Finland

- 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