# Mika Vesalainen

Curriculum Vitae

Pesäkolonkatu 22 33870 Tampere (a) +358 40 715 4355 in mikavesalainen

Date of Birth:12.12.1977

Expert in embedded software and firmware development with more than 20 years of experience



#### Technical Skills

Specialisms I am Technically oriented team leader with more than 20 years of hands-on experience in embedded SW development. The most advanced technical skills are C language, Linux, Python and GNSS.

Competencies Sophisticated and praised manager with power of continuously improve both efficiency and quality. Experienced to implement scripts and tools to analyze, inspect and simplify work assignments. Admin level understanding in Git, GitLab, Docker and Jira. Understand schematics and embedded HW topics. Capable to use lab devices like signal generators and spectrum analyzers. Strong focus on Agile mindset and state of the art DevOps practices (CI/CD/TA, Containerization). Also power user of office tools including Excel, Project and Visio.

Knowledge

OOP in C++/Java/Groovy/Go, MS VBA, Bash, VHDL, Asm (Arm/x86), Ansible, AWS, Blockchain, ML, SIL/HIL testing, SCA, Gnu Make, Octave, Jenkins, Vscode, Gnuplot, LATEX, CAD, Bluetooth, USB, DSP, Networking and IT support.

Contribution



**Patria** 





## Recent Work Experience

Over 15 years of experience in satellite navigation receiver implementation, primarily on RTOS, Linux and Android environments. More than 10 years of experience in leading and managing small teams.

## **GPS** Technology

01/2022-Current **Senior Manager**, *u-blox Espoo Oy*.

06/2018-12/2021 Manager, u-blox Espoo Oy.

05/2016-06/2018 Senior Engineer, Team Lead, u-blox Espoo Oy.

01/2016-05/2016 Senior Engineer, u-blox Espoo Oy.

In u-blox, I am driving CI/DevOps practices for the overall positioning product center. This is executed in close cooperation with the GNSS specialization teams. As part of the duties, me and my team maintains the development infrastructure, including Git, GitLab, build infrastructure, CI, artifact handling and KPI visualization. As a manager I'm responsible for product backlog management, budget planning, resource allocation, team satisfaction and schedules. My secondary roles includes: IT Coordinator, Jira Administrator, Shop Steward, Safety Representative, Agile/DevOps Coach and Technical Support. I'm also certified Functional Safety Engineer, Scrum Master and Product Owner.

05/2015–11/2015 Engineer, Staff/Manager, Qualcomm Technologies Finland Oy.

03/2013-05/2015 Engineer, Staff/Manager, Qualcomm Atheros Finland Oy.

09/2011-03/2013 Engineer, Staff, Qualcomm Atheros Finland Oy.

05/2011–09/2011 Engineer, Senior, Qualcomm Atheros Finland Oy.

12/2007–05/2011 Senior Member of Technical Staff, Atheros Technology Finland Oy.

04/2005–12/2007 **SW/HW Design Engineer**, u-Nav Microelectronics Finland Oy.

05/2004–04/2005 **SW Design Engineer**, *Tieto-X Oy / u-Nav Microelectronics Finland Oy*.

I participated in the design, implemention and debugging of software related to all major GNSS systems (GPS, GLONASS, BeiDou, Galileo, QZSS, SBAS). During this career I implemented and optimized various functionalities in the embedded GNSS system. These included signal processing tasks, dedicated file system, receiver manager, protocol handlers and many more. My duties also included project planning, estimation and line management. I worked as part of a software architecture team and was also responsible for continuous integration, build environments, version control and customer releases. I also participated in customer support activities, including providing on-site integration help at a customer facility in Taiwan. In parallel of my main duties I also built tools for analyzing the logs and help debugging.

# Past Work Experience

## Wireless Video Surveillance System

12/2002-04/2004 HW/SW Design Engineer, Ailocom Oy.

03/2002–12/2002 SW Design Engineer, Patria Ailon Oy.

I was one of the founders of the Ailocom Oy. My duties included design and implementation of HTML based user interface for the wireless video surveillance system, fixing embedded linux device drivers, and acting as SW release master. I was responsible of implementing SDK and debuggin Bluetooth communication for the system. Additionally I designed, built and ordered mechanical parts and helped in electronic tasks.

# 3G Cellular Technology

06/2001-03/2002 SW Design Engineer, Patria Ailon Oy.

I was involved in designing and implementing 3G base station decoder software for Nokia. The decoder software was implemented in C language for the OSE environment.

**Network Security** 

03/2000-06/2001 **SW Trainee**, SecGo Solutions Oy.

I designed and implemented dynamic link libraries in Windows, Linux and Sun Solaris operating systems using C++ language. Additionally my duties included designing and implementing shell scripts in the Unix environment to simplify control and installation of the software. Between 09/2000-06/2001 I worked part-time while studying.

Office Trainee

06/1993–10/1999 Office Trainee (Part-time), Andritz Kone Wood Oy/Kone Wood Oy.

I performed various office tasks as part-time trainee. This included using software packages like AutoCad and Excel to manually digitize inspection protocols. In order to simplify the usage of the digitized protocols I designed and implemented additional macros in MS Excel. I also assisted in various IT tasks including both hardware installation and software updates.

### Education

2001–2008 Master of Science (Technology), Tampere University of Technology.

Communication Electronics degree programme, major subject Embedded Systems, minor subject Communication Electronics. Degree Thesis "Receiver Manager Software Update" passed with grade "Very Good", produced while at u-Nav Microelectronics Finland Oy.

1997–2001 Bachelor of Engineering, Tampere Polytechnic.

Electrical Engineering degree programme, major subject Computer Systems Engineering. Degree Thesis "Plugin interface to SecGo Crypto IP Server" passed with grade "Very Good", produced while at SecGo Solutions Oy. I was awarded a total of four scholarships.

1993–1996 **Vocational Degree of Electrical Engineering**, *Vocational School of Päijät-Häme*.

Electrical Engineering degree programme, major subject Automation Technology. I was awarded a total of two scholarships the first one of which was for positive attitude in studying.

## Other Courses and Certificates

05/2020 Certified Professinoal Scrum Product Owner I, Scrum.org, Tampere

12/2019 Certified Professional Scrum Master I, Scrum.org, Zürich

10/2019 Certified Functional Safety Engineer, TÜV SÜD, Zürich

04/2019 First Aid Course EA1, Finnish Red Cross, Tampere

09-10/2013 Management Skills Program Europe, 3gHR, London

03/2004 Harmonized amateur radio examination certificate, CEPT A, Tampere

... More courses can be found in LinkedIn

#### Position of Trust

01/2018 Shop Steward (u-blox Espoo Oy)

06/2016 – Member in Health and Safety committee (u-blox Espoo Oy)

04/2002–05/2011 Safety Manager and Chairman of the Housing Cooperative (As Oy Kuoppamäentie 32)

## Languages

Finnish Native

English Fluent (Daily working language almost 20 years)

Spanish/Swedish Conversational

#### Other

Military Rank Signalman, Riihimäki 1997

Marital Status Married, 2 children

Driving License (Fin) ABEC

Interests Swimming, Cycling, Backgammon, Puzzles, Electronics, Programming