



Jarkko Sakkinen

Software Engineer

Experience

Researcher (fixed-term) at [Tampere University](#) [2023-03 – 2024-09]

- Fixed [CVA6](#) CPU upstream issues in the [Keystone Enclave](#) project.
- Implemented a virtual TPM and Linux driver for the CVA6 CPU.
- Created a custom operating system using BuildRoot for the CPU's manufactured as part of [SoCHub](#) project.

Software Engineer at [Profian Inc](#) [2022-01 – 2023-02]

- Implemented dynamic memory manager for the SGX2 guests in the [Enarx](#) project.
- Led the review process for SGX2 kernel patch set.
- Fixed initialization and firmware loading issues in the AMD CCP driver used by the SEV-SNP attestation infrastructure.

Software Engineer at [Intel Corporation](#) [2011-04 – 2021-12]

- Linux kernel engineer at Open Source Technology Center (OTC).
- Implemented TPM2 and Intel SGX support for the Linux kernel.
- Became (co-)maintainer of keyring, TPM, trusted keys and SGX maintainer in the Linux kernel.

Software Engineer at [Tieto Corporation](#) [2010-01 – 2011-03]

- Implemented MeeGo security features.
- Implemented WebGL support for QtWebKit.
- Consulted Linux, Symbian and Windows customer projects.

Software Engineer at [Nomovok Ltd.](#) [2007-10 – 2009-12]

- Implemented prototype of the multi-touch support for QtWebKit, which was used as the basis for the official support later on.
- Consulted Linux, Symbian and Qt customer projects.

Software Engineer at [Sasken Technologies](#) [2007-10 – 2009-12]

- Implemented GUI features for the Series 60 platform.
- Consulted Symbian OS customer projects.

Civilian Service at [Tampere University](#) [2007-01 – 2006-01]

- Attended to the mandatory civilian service in Finland.
- Implemented course management system for the computer science department using Java Struts and PostgreSQL.

Software Engineer at [Sasken Technologies](#) [2003-10 – 2005-12]

- Implemented audio adaptation layer for the Symbian OS.
- Consulted Symbian OS customer projects.

Summer Trainee at [Nokia Corporation](#) [2003-09 – 2003-06]

- Implemented a custom automated profiler for ARM development boards.
- Profiled performance hotspots in GTK+ GUI library.

Software Engineer at [Solita Oy](#) [2003-05 – 2003-01]

- Implemented J2EE components for a multi-tier web application
- Used JBoss and WebLogic for the Java code.
- Used Oracle and PostgreSQL for the database storage.

Course Assistant at [Tampere University](#) [2002-09 – 2002-12]

- Worked as a course assistant for AI fundamentals course.
- Guided the exercise classes of the course.

Research Assistant at [Tampere University](#) [2002-03 – 2002-09]

- Implemented a multi-user urban city planning application for the Department of Geoinformatics.
- Designed Google maps alike tiling algorithm for scrolling and zooming a city map in the Windows client.

Research Assistant at [Tampere University](#) [2001-08 – 2001-05]

- Designed a test framework for DisCo, which is a formal verification tool for reactive systems.
- Implemented a test suite with a high coverage for the DisCo features.

Contact

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Summary

An experienced **software engineer** and **Linux kernel maintainer**. My focus is on operating systems, firmware and bootloaders, and on low-level programming.

Open to roles ranging from **software** and **systems** engineering.

Education

[Tampere University of Technology](#)
1999-08 – 2005-06
M.Sc. Computer Science

Skills

DevOps

GitHub Actions • GitLab CI/CD • Podman • QEMU
• Woodpecker

Programming

Languages

C • C++ • Python • Rust

Upstream Projects

BuildRoot • Enarx • Linux Kernel • Qt • WebKit