

Max Vilkki

SOFTWARE GENERALIST

Gästansintie 55, 02570 Siuntio KK, Finland

☎ +358 44 538 0929 | ✉ max.vilkki@gmail.com

20+ years of versatile software development experience spanning web technologies and native C++ multimedia programming, with a strong hobby background in game-engine development. A programming generalist with a constant focus on end-user experience and UI design. Most recently established testing capabilities for AI-based products, including evaluation methods for LLM-driven features; works fluently with AI coding agents as part of daily development work.

Portfolio: codise.org

Experience

Cadentia Technologies Oy

Helsinki

SENIOR SOFTWARE ENGINEER

10/2023 – 04/2026

- Designed and implemented a company-wide testing capability for AI-based vertical products, including evaluation methods for LLM-driven features.
- Contributed to the Django-based core services, supported front-end development, and ran field-engineer duties during pilot deployments.
- *Python, Django, OpenAI API, Pydantic, React, PyTest, Playwright, Helm, Kubernetes, Docker, Terraform, PostgreSQL.*

Mavericks Software Oy

Espoo

SOFTWARE CONSULTANT

10/2020 – 10/2022

- On-site and remote consultant for industrial and media-sector clients (incl. ABB, Alma Media / telku.com).
- *JavaScript, TypeScript, React, Canvas, SCSS.*

Spaceify Oy

Helsinki

FOUNDER

01/2016 – 05/2026

- Developed the Spaceify SelfScanner product line from idea to soft launch — use cases, user interviews, product UI design, and full-stack implementation.
- *Node.js, MySQL, WebSockets, TypeScript, Ionic/Angular, C++, Docker.*

Screen.io Oy

Helsinki

SOFTWARE DEVELOPER

10/2017 – 10/2020

- Prototyped the next-generation technology stack: re-modelled the SQL-based data layer and migrated more than a thousand individual databases into a single PostgreSQL database.
- *TypeScript, React, NextJS, Node.js, CockroachDB, PostgreSQL, SQLite.*

Helsinki Institute for Information Technology (HIIT)

Espoo

RESEARCH ASSISTANT

06/2009 – 09/2017 (in periods)

- Research prototypes for multi-touch user interfaces, public displays, depth cameras, and mobile-driven big-screen gaming.
- C++, OpenGL, Qt and Node.js implementations, e.g. for Mobile World Congress 2013 and CEBIT 2012.

Education

Aalto University / Helsinki University of Technology

Espoo

M.Sc. STUDIES IN COMPUTER SCIENCE (247 / 300 ECTS)

2003 – 2015

- Dept. of Computer Science. Major: Interactive Digital Media. Minors: Content Production, Software Business.

Lohjan Lukio

Lohja

MATRICULATION EXAMINATION

1999 – 2002

Skills

Native	C++ (14 y), OpenGL/GLSL, SDL2/3, Dear ImGui, CMake, Valgrind
Back-end	Python, Django, Node.js, PostgreSQL, SQLite, WebSockets, LLM integrations
Front-end	TypeScript, JavaScript, React, HTML/CSS
Cloud/DevOps	Linux (21 y), Docker, Kubernetes, Helm, Terraform, Nginx
Testing	PyTest, Playwright, AI/LLM evaluation methods
Languages	Finnish (native), English (fluent)

Selected projects

Cadentia Technologies Oy — AI

Helsinki

BACKEND, TESTING, AND LLM TEST TOOLING

10/2023 – 04/2026

- Django backend services, driving the adoption of testing across the whole company, and building custom tooling for testing LLM-driven features.
- *Role:* Back-end developer / Test lead. *Tech:* Python, Django, OpenAI API, Pydantic, React, WebSockets, REST, PyTest, Playwright, PostgreSQL, Helm, Kubernetes, Docker, Terraform.

ABB — Industry

via Mavericks Software Oy

FRONT-END DEVELOPMENT

05/2021 – 11/2022

- Front-end development and UI design consulting for ABB.
- *Role:* Front-end developer. *Tech:* JavaScript, TypeScript, DOM, Canvas, SCSS.

Alma Media — Media

via Mavericks Software Oy

TELKKU.COM

01/2021 – 05/2021

- Front-end development consulting for Alma Media's telkku.com service.
- *Role:* Front-end developer. *Tech:* JavaScript, TypeScript, React.

Screen.io Oy — Startup

Helsinki

DATA MIGRATION TOOL

2019 – 2020

- Re-modelled the entire production data set in SQL and migrated it from thousands of individual databases and configuration files into a single 20 GB database.
- *Role:* Back-end developer. *Tech:* Node.js, DirtyDB, CockroachDB, SQLite3.

Screen.io Oy — Startup

Helsinki

NEXT-GENERATION TECHNOLOGY STACK

2017 – 2020

- Prototyped Screen.io's upcoming technology stack as a full-stack effort.
- *Role:* Full-stack developer. *Tech:* Node.js, Server-Sent Events + REST, PostgreSQL, CockroachDB, SQLite3, React, NextJS, HTML, CSS.

Spaceify Oy — E-commerce / Startup

Helsinki

SPACEIFY SELFSCANNER PRODUCT LINE

2017 – 2020

- Responsible for every stage of the project: from idea through use cases and user interviews to product UI design, full-stack implementation, and soft launch.
- *Role:* Full-stack developer. *Tech:* Node.js, MySQL, WebSockets, TypeScript, Ionic (Angular), HTML, CSS, Bash, C++.

Aalto University Communications — Marketing

Espoo

PROMOTIONAL TOUCHSCREEN UI FOR SLUSH 2015

2015

- Web-based touchscreen showcase application built for Aalto University for the Slush 2015 event.
- *Role:* Full-stack developer / UX design. *Tech:* JavaScript, HTML5, CSS, Node.js, touchscreen input mapping.

HIIT — Research

Helsinki

BITSIGN: AR-BASED INDOOR NAVIGATION (KAMPPI)

2014 – 2015

- Contributed to project planning, designed the navigation-tag data format, and produced the release builds of the mobile apps for Google Play and Apple AppStore.
- *Role:* Design, back-end development. *Tech:* Node.js, data-format design, Google Play, Apple AppStore.

HIIT — Research

Espoo

REAL-TIME CMS FOR TOUCHSCREEN CONTENT (MWC 2013)

2012 – 2014

- Designed and built a real-time multi-user CMS for managing physics-based touchscreen content. Deployed at the EIT ICT Labs stand at Mobile World Congress 2013.
- *Role:* Full-stack developer. *Tech:* Node.js, SocketStream, MongoDB, CoffeeScript, HTML5, CSS, Bootstrap.

HIIT — Research

Espoo

KINECT INTEGRATION FOR LARGE TOUCHSCREEN DISPLAYS (CEBIT 2012)

2012

- Kinect depth-camera capture that streams detected-person coordinates over XMPP and merges duplicates across overlapping views in multi-camera setups. 3D visualisation of detected users. Deployed at the EIT ICT Labs stand at CEBIT 2012.
- *Role:* Software developer. *Tech:* C++, OpenGL, CornerStone SDK, Kinect, OpenNI, QtCore, QXMPP, qmake.