JUHA WILPPU

Engineering Manager & Software Architect

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SUMMARY

Experienced Engineering Manager and Software Architect with 13+ years of building scalable, high-performance cloud applications. Expert in AWS, Kubernetes, and clean architectural design, with a strong focus on security, maintainability, and developer experience.

Proven track record of leading teams, mentoring engineers, and delivering critical systems across healthcare, genomics, and finance. Seeking a high-impact remote role in Europe where I can combine hands-on development with architectural leadership to drive long-term business value.

EXPERIENCE

Engineering Manager
Nordhealth

📅 04/2022 – Present   📍 Helsinki, Finland

- Scaled the team from 2 to 6 developers, balancing hands-on coding with technical leadership.
- Led development of a customer-facing product with 3,200+ weekly bookings and a 4.4/5 satisfaction score.
- Directed frontend redesign of a legacy Django app, then transitioned to a new Next.js-based booking portal.
- Led complex integration efforts with existing PMS systems, aligning across multiple teams with competing priorities to ensure long-term compatibility and performance.
- Owned technical architecture and AWS infrastructure, setting up Terraform and CI/CD pipelines.
- Promoted secure coding practices, contributing to a top result in a Cure53 white-box audit.
- Oversaw implementation of BankID authentication (Telia ID) and NextAuth-based login, guiding the team through secure session design.
- **Key Technologies:** Next.js, TypeScript, PostgreSQL, AWS

Lead Developer
HiQ

📅 11/2021 – 04/2022   📍 Espoo, Finland

- Led architecture and development for a complex React application on AWS.
- Contributed to full-stack implementation using Node.js, React, and cloud infrastructure.
- **Key Technologies:** React, Node.js, AWS.

EDUCATION

M.Sc. (Tech), Software Engineering
University of Turku

📅 2014   📍 Turku, Finland

M.Sc., Physics
University of Turku

📅 2012   📍 Turku, Finland

CERTIFICATIONS

AWS Certified Solutions Architect – Professional
Amazon Web Services

📅 2025

Certified Scrum Product Owner (CSPO)
Scrum Alliance

📅 2021

PROJECTS

Founder & Lead Developer
siikli.fi

📅 2017–present   📍 Espoo, Finland

- Built and operated a mission-critical ERP platform used by a Finnish agriculture company to invoice over €13.5M.
- Developed core features for product catalogs, order creation, invoicing, storage collection, and reporting.
- Ensured 99.99% uptime with hourly backups across two countries; designed, built, and maintained entirely as a solo developer.
- Currently rewriting the platform using React, Node.js, PostgreSQL, and AWS.
- **Key Technologies:** AngularJS, Spring Boot, MySQL.

Head of Development, promoted from Senior Developer

BC Platforms

📅 09/2017 – 11/2021   📍 Espoo, Finland

- Led architecture and team strategy for the Personalized Medicine Platform, optimizing multi-cloud genomic processing (AWS, GCP, Azure) and CI/CD pipelines.
- Built full-stack genomic apps in a high-speed R&D setting, including workflows handling FASTQ files (3–30 GB) using up to 2,000+ CPUs.
- Launched Genevision with CCPM, contributing to drug dosage analysis and genotyping visualization. Platform UI design was featured in a $50K promotional campaign and adopted company-wide.
- Pioneered React adoption across the company and introduced DevOps practices (Docker, Kubernetes, RabbitMQ, cloud automation).
- Implemented authentication systems including Azure AD SSO, OpenID Connect, OAuth 2.0, and Hawk. Supported secure access for CE-IVD-compliant platforms.
- **Key Technologies:** React, TypeScript, Spring Boot, Java, PostgreSQL, Terraform, Kubernetes, Docker, RabbitMQ, AWS, GCP, Azure.

IT Analyst

Nordea

📅 08/2016 – 09/2017   📍 Helsinki, Finland

- Built backend services for portfolio performance reporting, AuM, and financial instruments like collar loans and swaps.
- Mapped complex financial transactions (splits, reverse splits) and optimized long-range P&L calculations, cutting processing time by 80%.
- **Key Technologies:** C#, .NET, Oracle DBMS, REST, SOAP.

Software Engineering Analyst

Accenture

📅 02/2014 – 08/2016   📍 Helsinki, Finland

- Built enterprise financial tools and improved backend reliability for pension systems.
- **Key Technologies:** Java, JBoss, Linux, Oracle DBMS.

Software Developer

Tehden

📅 06/2012 – 05/2013   📍 Turku, Finland

- **Key Technologies:** jQuery, php, PostgreSQL.