# Jarppe Länsiö

Senior System Architect & Programmer jarppe.lansio@metosin.fi +358 40 127 2229 @jarppe



#### Profile

I'm a software enthusiast with over 25 years of professional experience from various areas of software development. The main bulk of my career has been devoted to working with products with long life cycle, but I have also worked in many short projects in different fields. Both kinds of projects have taught me to appreciate clean and elegant solutions that are easy to implement, test and maintain.

I enjoy working in challenging projects where I can apply my skills to find elegant solutions to complex problems. I love clean code and hate 'magic' in code, design and frameworks. I'd like to think that my special talent is to be able to think out-of-the-box and find novel solutions outside of the typical "this is what we have always done" mindset.

I can understand different stakeholders' interests and communicate with them in the terms that they understand. Meaning, I speak marketing and management nearly as fluently as I speak tech jargon.

## Key skills

- **Common**: Software design and implementation, software and system architectures, product development, leading development teams, sales support, object-oriented analysis, –design and –programming, functional programming
- Specialties: Geographical visualization, distributed computing, concurrency
- Domains: Telecom, Military, Network management, Media
- Processes: Scrum, Kanban, XP, TDD, Continuous integration, deployment and delivery
- Experience:
  - Languages: C (since 1994), C++ (1995), Java (1997), Javascript (2005), Clojure (2011), ClojureScript (2014) also fluent in Perl, Python, SQL, Scala, bash
  - Frameworks: Spring, Guice, Jersey, Restlet, CORBA
  - Persistency: SQL, Hibernate, JPA, Spring JDBC, JDBC, MongoDB, Oracle, MySQL, PostgreSQL, H2, HSQLDB, Neo4J, Cassandra DB, Datomic
  - **UI:** React, Redux, Reagent, Angular, ClojureScript, Om, D3.js, Hiccup, Enlive, Swing, HTML, CSS, JSP, JSF, Seam, Raphaël, Spring MVC, jQuery, MooTools, OpenAjax HUB, Knockout, Flot
  - GIS: Leaflet, OpenLayers, ESRI ArcGIS, Luciad Map, MapServer, Polymaps
  - Testing: JUnit, EasyMock, JMock, Mockito, Hamcrest, Midje
  - Containers: Jetty, Tomcat, Glassfish, JBoss, Websphere, Weblogic

 Misc: Guava, Apache commons, Log4J, SLF4J, JodaTime, DOM4J, Ring, Compojure, AWS, GCP

### Languages

- Finnish (native)
- English (fluent)
- Swedish (basics)
- Estonian (basics)

### Education

• 1994, Computer Engineering BSc, Raahe Institute of Computer Engineering

# Work experience

2012 -

• Senior System Architect, Programmer, Co-founder at Metosin

2009 - 2011

Software Architect at Kilosoft Oy

2008 - 2009

• Senior Software Developer at Webmedia AS, Tartu, Estonia

2005 - 2008

Software Architect at Patria Systems, C4I

1995 - 2005

Senior Specialist at Nokia Mobile Phones, later Nokia-M

1994 - 1995

Software Developer at Genimap Oy

#### Selected project references

2019- Leading telecommunications provider

- Programmer, DevOps
- Core technologies: Clojure, Python, JavaScript, React, Redux, Kubernetes, Oracle, Redis

2018-2019: Lupapiste, architecture rewrite for internationalization

- Architect
- · Design new architecture for Lupapiste
- First release delivered on time to international customer
- Core technologies: Clojure, ClojureScript, Datomic DB, Docker, GCP

#### 2017-2018: Qvantel, International telecommunications application

- Architect
- Design architecture, implement backend, training for new recruits
- Core technologies: Clojure, ClojureScript, Scala, Cassandra DB, Docker, Kubernetes, Mesos

## 2017: Zapflow, global startup for investment portfolio management

- Architect
- Design architecture, implement backend, training for new recruits
- Core technologies: Clojure, ClojureScript, Datomic DB, Docker, AWS

#### 2015-2017: Modern integrated service desktop & process enchancement for a telecom company

- Lead Developer / Architect
- Consultation on modernizing customer multi-party design and construction processes
- Design and implementation of a single-page app & APIs for multiple roles & stakeholders
- Core technologies: Clojure, ClojureScript, Ansible, Reagent, Re-frame, Kekkonen, lots of databases, legacy systems with various protocols, formats.

#### 2015: Metosin Oy, IT-services company

• Clojure consultancy and coaching of an IT-services company developing new product.

## 2014-2015: Metosin Oy, Logistics company

- Lead technical architect for integrated self-service system
- Architecture design and implementation of a self-service system integrated to corporate SAP, ERP-system and payment providers
- Core technologies:
  - JavaScript single-page app (Angular), Java 8 backend, Oracle database

#### 2013 – 2014: Metosin Oy, Solita Oy / Government authority

- Lead technical architect for billing system renewal
- Architecture design and implementation of a billing system integrated to corporate SAP and e-billing system (Opus Capita)
- Core technologies:
  - JavaScript single-page app (Knockout), Clojure backend (JVM/Jetty), MongoDB storage

## 2012 – 2013: Metosin Oy, Lupapiste.fi (http://lupapiste.fi)

 Senior system architect for Lupapiste.fi (Solita Oy and Finnish Ministry of Environment), a system for digitalizing building permit processes of Finnish municipalities.

- Core technologies:
  - Javascript single-page app (Knockout), Clojure backend (JVM, Jetty), MongoDB storage

## 2012 – 2013: Metosin Oy, International media corporation (confidential)

- Senior system architect for design and implementation of corporate-wide integration platform and centralized payment system for online and mobile payments.
- Core technologies:
  - Java, REST, SOA, Tomcat, MySQL, Apache, Open LDAP

## 2009 – 2011: Kilosoft Oy, TitanNMS (http://titannms.com)

- Chief Architect for TitanNMS product. TitanNMS is a dynamic distributed network monitoring and planning tool that can visualize network topology and status on multiple displays, including various geographical maps.
- Technical team leader
- Designed architecture, implemented core components:
  - Distributed, lock free data model with efficient, robust and dynamic replication
  - Rich, dynamic Javascript UI with a map view
- Core technologies:
  - Java SE 6, Spring 3, Guava, Jetty
  - HTML5, CSS3, Javascript, jQuery, Raphaël, Polymaps

# 2011: Kilosoft Oy, Telecom manufacturer

- Re-design for large data-analysis product
- Utilized multi-core HW using highly parallel algorithms
- Implemented PoC
- PoC implemented ahead of schedule
- Achieved over 10 fold performance gain on multi-core system compared to existing solution
- Technologies: Java SE 6, Spring 3

## 2010: Kilosoft Oy, Public sector

- Architecture design, team leader
- Technologies: Java SE 6, Spring, Tomcat, MySQL, Javascript, JSP, jQuery

## 2008 – 2009: Webmedia AS, Web shop project

- Customer management application, fraud detection service
- Technologies: Java SE 6, Spring 2, JSF, Hibernate, JBoss, Oracle

2008: Patria Oy, Classified project for Finnish Navy

- Designed new application for distributed data gathering and visualization application
- Visualize complex multidimensional data overlaid on maritime maps
- Technologies: Java SE 5, Swing

## 2005 – 2007: Patria Oy, Classified project for Finnish Air Forces

- Designed complex real-time visualization and control application
- Visualize real-time tracking information on multiple map views
- Led the implementation team
- Technologies: CORBA, Java SE 5, Swing, ESRI ArcGIS, Luciad Map

# 2004 - 2005: Nokia-M, Maemo platform connectivity

- Responsible for connectivity with PC and home entertainment systems
- Product concepting, design and technical responsible for implementation
- Technologies: C -language, Linux 2.6 kernel

#### 2003 - 2004: Nokia-M, Next Generation Nokia M2M Platform

- Chief Architect
- Designed architecture for Next-Generation Nokia M2M Platform
- Proof of concept implementation for M2M Gateway product
- Technologies: CORBA, Linux 2.4, C and Java -languages

### 1995 – 2003: Nokia Mobile Phones, Nokia M2M Platform

- Developer, later an architect and chief architect
- Designed product platform architecture for Nokia M2M concept
- Designed Wireless-IOP protocol (Light-weight Wireless CORBA mapping)
- Designed Java profile for embedded, connected devices (co-op with Siemens Mobile)
- Lead of Nokia standardization team (OMG and JCP)
- Implemented initial M2M Gateway core functionality
- M2M gateway bridges CORBA over TCP/IP (IIOP) and CORBA over GSM networks (WIOP)
- Designed specification for subcontracted components
- 4 patent applications (1 patent pending, 2 granted)
- Technologies: C, C++, Java, CORBA, Oracle, Linux, HP-UX

#### **Activities and Interests**

• Computer Science

- Functional programming, especially with Clojure
- Parallel and concurrent programming technologies
- NoSQL databases

# Other

- Taido (Japanese martial art), jogging, snow-boarding and scuba diving
- Family life with wife, three kids (born 1995, 1998 and 2000) and a Jack-Russell terrier