## Lars Johansen

# Curriculum Vitae

### Personalia

CELL PHONE 857-277-3349 CURRENT LOCATION San Jose,
EMAIL larskrjo@gmail.com California,
LANGUAGES English & Norwegian USA

#### WORK EXPERIENCE

OCT 2014 - SEP 2025

Principal Software Engineer & Team Lead at Okta Inc., San Francisco, USA Inbound Federations Team, Engineering Dept.

Designed and built large-scale, mission-critical software in a fast-paced agile environment. Worked on implementing, innovating and extending protocols such as OpenID Connect, OAuth 2.0 and SAML, as well as providing guidance and leadership for engineering, product, and design. Co-inventor of patents related to identity, federation, and authentication protocols.

- Creator of Auth.io, a tool to educate and help people learn about various authentication and authorization principles, concepts and flows using modern protocols.

Spring - Fall 2014, Summer 2012, Summer 2011

IT Consultant / Intern at BOUVET, Oslo, Norway

National Collection Agency, Custom Application development, Intranet Integration

Developed a letter submission system for debt collectors in 2014. As Intern I developed BI solutions using SharePoint as platform in 2012, and an Android application to encourage people to use bicycle as transportation in 2011.

#### EDUCATION

2013 Visiting Student writing Master thesis in **Network Coding in WiFi** 

Massachusetts Institute of Technology (MIT)

Cambridge, Massachusetts, USA

Investigated and implemented WiFi reliability mechanisms in both unicast and multicast

Under supervision of Prof. Muriel Médard

2011 - 2012 Special Student at The Graduate School of Arts and Sciences

Harvard University

Cambridge, Massachusetts, USA

Grade average: A/A- with GPA: 3.75 of 4

Selected courses: Systems Dev., Mobile Software Eng. and Heterogeneous Networks at MIT

2008 - 2013 Master study in Communication Technology

The Norwegian University of Science and Technology (NTNU)

Trondheim, Norway

Grade average: A

Selected courses: Distr. Real-time Systems, Algorithms & Data Structures and Software Eng.

2007 - 2008 Military service in His Majesty The King's Guard, The Drill Platoon

Evaluation: Initiative - above expected, General performance - excellent

Transcripts of grades can be provided on request.

#### Programming and Development skills

Passionate about computer networks and programming since childhood, beginning with web development and hosting network games before moving into application development for networked and standalone systems. Experienced with the IP stack, Linux/Unix, and mobile platforms, and more recently focused on AI - exploring large language models (LLMs), their inner workings, and hands-on experimentation with Ollama (a local LLM runtime) and self-hosted models.

Extensive experience in Java, with considerable experience in Python and JavaScript, and working knowledge of C, C++, Objective-C, and C#. Skilled in developing software for Linux/Unix, Android, and iOS platforms.

I am familiar with the following technologies and tools:

IntelliJ IDEA, PyCharm, WebStorm, Visual Studio Code (VS Code). Servers Apache Tomcat (Java servlet container / web app server), Nginx, Uvicorn (ASGI). Testing Selenium, JUnit, Mockito. Modeling UML (class, sequence, state machine, use case diagrams). MySQL, NoSQL, Redis, Elasticsearch; ER modeling/diagrams. Databases Networking HTTP, TCP, UDP, IP, ARQ, Network Coding (RLNC, XOR). Build & CI/CD Apache Mayen, Apache Ant, Jenkins; Project management with JIRA, Confluence. Version Control CLOUD & HOSTING AWS Route 53, EC2, KMS, Load Balancing/Monitoring, Secrets Manager. Web Technologies HTML, CSS, JSP, Browser security (CSP, CORS, headers). OPERATING SYSTEMS Linux (Ubuntu/Debian), macOS, iOS, Android, Windows. Spring Boot, REST APIs, FastAPI. Frameworks & APIs Containers & Orchestration Docker, Kubernetes.

I am eager to expand my knowledge in these and related areas.

## Interests and Activities

I have always been drawn to solving complex problems and finding optimal solutions. With experience, I've learned that working on the right problems is just as important - never optimize something that shouldn't exist. I'm a fast learner who thrives on challenges, both in computer science and in life. I was part of the winning Oslo team in the Norwegian Mathematical Olympiad (The Niels Henrik Abel Contest) and also competed in the junior national gymnastics contest. Outside of work, I enjoy tennis, music, playing guitar, good food, and spending time with friends. I am fluent in both written and spoken English and Norwegian.

#### REFERENCES

References can be provided upon request.