LARS ERIK OPDAL

Systems developer

BIOGRAPHY

I started playing chess and video games in preschool and became amused by mathematics. Finished elementary school math curriculum two years early, at age 10. Developed a serious interest in computers when discovering the world wide web in ´94, as it initiated a curious desire to understand how electrical signals in transistors could be converted to interactive text on screens.

Courses in frontend technologies (HTML, CSS, JavaScript) and relational database modelling in high school led to starting a small company making web pages at the end of the dot com-era. Became very interested in Linux as a free alternative to Windows and migrated to the Linux platform in 2004. Worked a few years with desktop publishing before college education, majoring in natural science.

Became interested in tutoring during college where I was a teaching assistant and later private tutor in mathematics and physics. Founded a development company during University and did projects for international customers. In the finishing phase of my master's degree in computer science I worked at the University of Oslo (UiO), grading mandatory assignments and exams in computer science, before starting my professional career in 2016.

CONTACT ME

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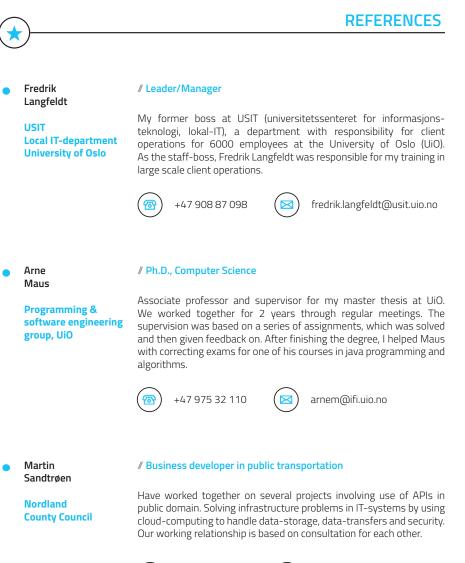Kjelsåsveien 118a, 0491 Oslo

PROFESSIONAL SUMMARY

After finishing the master's degree, I went on to Simula research lab for a small project in the summer of 2016. I then joined the University of Oslo's IT-department working with client operations and automating maintenance tasks in a Windows client environment. After a short period at UiO I started at Unit (former Ceres), first on the Cristin project (Current Research Information System in Norway) as a frontend developer in an agile environment with Scrum as the main methodology. Continuous integration (CI) was an important part of the development, test and production pipeline. Technologies like JavaEE and JSF alongside traditional frontend languages like HTML, CSS and JavaScript were used. After one year at Cristin I moved to another project within the same organization: The EWP (2.0) project – Erasmus Without Paper – implementing the API's of the EWP standard and targeting Norway's Student Information System (SIS), Felles Studentsystem (FS) and their institutions as the data source. Developed on JBoss/EAP platform with JavaEE as backend on top of JPA/Hibernate ORM and Oracle Database. Currently also working with the FS API; opening for a broader range of services towards the higher education institutions of Norway.

SKILLSET

My technical skills are centered around the open source tech stack with Linux; Apache, Java and Python. I also have a large number of hours in the programming language C due to my education from the university of Oslo. Proficient in the Microsoft office suite. Very comfortable with the Adobe Creative Suite, especially photo and video editing. Familiar with 3D-design both in a programmatic way and from a designer's perspective with tools like Maya and Blender. The last couple of years I have acquired a lot of experience in web development where I am working towards a senior level of experience. Besides being a developer, I give lessons in introductory courses in computer science at high school and college level.

REFERENCES

Fredrik Langfeldt

USIT
Local IT-department
University of Oslo

// **Leader/Manager**

My former boss at USIT (universitetssenteret for informasjons-teknologi, lokal-IT), a department with responsibility for client operations for 6000 employees at the University of Oslo (UiO). As the staff-boss, Fredrik Langfeldt was responsible for my training in large scale client operations.

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Arne Maus

Programming & software engineering group, UiO

// **Ph.D., Computer Science**

Associate professor and supervisor for my master thesis at UiO. We worked together for 2 years through regular meetings. The supervision was based on a series of assignments, which was solved and then given feedback on. After finishing the degree, I helped Maus with correcting exams for one of his courses in java programming and algorithms.

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Martin Sandtrøen

Nordland County Council

// **Business developer in public transportation**

Have worked together on several projects involving use of APIs in public domain. Solving infrastructure problems in IT-systems by using cloud-computing to handle data-storage, data-transfers and security. Our working relationship is based on consultation for each other.

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EDUCATION

- **University of Oslo** — **COMPUTER SCIENCE**
  AUG 2013 - JUN 2016
  Master's degree in computer science – programming and networks.
  Master's thesis: A comparison of parallel computing/HPC in multicore and cluster environments.

- **University of Oslo** — **COMPUTER SCIENCE**
  AUG 2011 - JUN 2013
  Courses in object-oriented programming (Java), digital image processing (Matlab) and problem solving with high level languages (Python).

- **Vestfold University College** — **COMPUTER ENGINEERING**
  AUG 2008 - JUN 2011
  Bachelor's degree in computer engineering. Main project: Programming the landing module for a UAV, including design of a pattern-recognition system for the onboard cameras. Programmed in C/C++ with the OpenCV library.

- **University of Ås** — **MATHEMATICS AND NATURAL SCIENCE**
  AUG 2007 - JUN 2008
  Introduction courses in mathematics and natural science.

WORK EXPERIENCE

- **Triona** — **Systems developer**
  OCT 2019 – CURRENT
  Working with development and implementation of APIs in the Trasé (1.1 - 2.0) project – Trasé is a product from Bane Nor providing route description for the railway network. Here all of Norway's railway sections, instructions for operating technical equipment and special provisions are described in a map solution (like Google Maps). Development is done mainly with C# .Net Framework 4.6, SQL Server and Angular.

- **Unit** — **Software developer**
  JUN 2018 - OCT 2019
  Currently working with the EWP (2.0) project – Erasmus without paper. Implementing the APIs of the EWP standard. Targeting Norway's student information system (SIS), Felles Studentsystem (FS) and their institutions as the data source. Developed on JBoss/EAP platform with java as backend on top of JPA/Hibernate ORM and Oracle Database.

- **CERES/KDTO/Unit** — **Software developer**
  MAR 2017 - JUN 2018
  Developing services for the Education & Research Sector: CRISTIN and CRISREST (CRISTIN API) (current research information system in Norway). Developed on JBoss/EAP platform with Java as backend and JSF/XHTML/javascript as frontend.

- **USIT/ University of Oslo** — **Staff engineer**
  AUG 2016 - MAR 2017
  Working with client operation support. Windows, Linux and Mac at the local IT-department.

- **University of Oslo** — **Examiner**
  NOV 2016 - DES 2016
  Grading 200 exams for course in algorithms and data structures (INF2220).

- **Simula Research Laboratory** — **Summer intern**
  JUN 2016 - AUG 2016
  Internship at networks department. Development of data collector tool for analyzing traffic in The Border Gateway Protocol (BGP). The application was developed with Python and MySQL database.

- **University of Oslo** — **Examiner**
  JAN 2016 - AUG 2016
  Grading exams and providing feedback on mandatory assignments for 20 students in data communications course (INF3190).

- **Lama Software AS** — **Project manager**
  JAN 2014 - DES 2017
  Worked as project manager and system architect. Most of development was done by hiring freelance. Projects included: Lead manager web application with integration with craiglist's and finn.no's APIs for Miami rental authority. A mobile app for shopping centers with map-functions, programmed in HTML, CSS, javascript and developed with Adobe PhoneGap. Creating and maintaining webpage for a music festival.

- **Bergans Mekanikk AS** — **Software engineer**
  JAN 2013 - AUG 2013
  Developed web application for calculating travel routes in Django framework with the Python programming language, including an approximated solution to the traveling salesman problem (TSP) with heuristics.