David Lindelöf

Chemin de l'Ancienne-Ecole 37, 1288 Aire-la-Ville   Born 16 Dec 1976
+41 79 415 66 41   Swedish, C work permit
lindelof@ieee.org   https://www.linkedin.com/in/lindelof/

Lead data scientist with more than 15 years of experience applying machine-learning techniques in complex software projects

Mar 19 – Present: Lead Data Scientist, Expedia Group — Develop recommender systems that help hotels improve their listing on Expedia's websites. Design work processes between data scientists and data engineers. Mentor new and existing data scientists. Survey and introduce new statistical techniques. Report on algorithm performance at VP level. Write white papers and reports.

- Delivered 5 promotion recommender systems using distributed causal inference with Apache Spark, Python, and R
- Documented best practices for developing machine-learning applications using PySpark, scikit-learn and AWS S3
- Developed techniques for unit testing and integration testing machine learning applications
- Reduced time-to-market for new systems by introducing agile processes
- Spread machine-learning and software engineering best practices by facilitating seminars and mentoring
- Coached data engineering team about Python's machine-learning ecosystem
- Improved accuracy of ongoing analytics work by championing and teaching causal inference techniques

Jul 18 – Feb 19: Director, Data Science, Expedia Group — Managed team of data scientists building recommender systems. Wrote job descriptions, interviewed candidates. Conducted one-on-ones and performance reviews. Represented team towards internal stakeholders. Developed agile working models between data scientists and engineers. Developed recommendation prioritization system.

- Oversaw delivery of 2 data science products
- Onboarded new hires
- Represented Expedia at ISO C++ Study Group 19 on Machine Learning
- Quantified effectiveness of different communication channels using survival analysis
- Developed techniques for end-to-end testing data science products

Sep 10 – Jan 18: Chief Technology Officer, Neurobat AG — Responsible for R&D unit. Managed team of 7 research and software engineers. Developed a C/C++ library for optimal control of building systems. Oversaw development of 3 smart controllers for space heating. Collaborated on 3 large European research projects. Coordinated work with external hardware suppliers. Coordinated R&D work with business development. Presented company technology to customers.

- Developed family of 3 space heating controllers on time and budget using agile methods
- Reported energy savings of 28% in academic journal based on 10 test installations
- Oversaw development of cloud-based heating control system protocol using WebSockets and PostgreSQL
- Developed novel algorithm for estimating effect of energy conservation measures, published as R package
- Grew, mentored, and led team of research engineers from 0 to 7 people

Jan 10 – Jun 13: Lecturer, EPFL — Taught a freshman-level C programming class.

- Developed C programming curriculum for classes of about 60 chemistry students
- Wrote automated assignment grader

Feb 10 – Dec 10: Senior Software Engineer, AlmaZ Informatique SA — Developed payment provider integration systems for Nespresso.

- Developed PCI-compliant credit-card processing system that integrates a dozen international payment system providers
- Developed automated testing tools using Scala

Dec 07 – Jan 10: Senior Software Engineer, Optaros SA — Developed enterprise integration solutions for Nespresso.

- Designed and implemented components of an enterprise-wide service bus using Mule and JBoss
- Installed and configured a software lifecycle management system based on Trac

Aug 04 – Nov 07: Technical Lead, Adhoco AG — Designed software for an embedded smart home controller.

- Designed and implemented an OSGi-based firmware for a smart home controller
- Coached a team of 3 software engineers on software best practices

Feb 03 – Nov 07: Research Assistant, EPFL — Developed algorithms for 2 European research projects (about 5 organizations, 10 people each) aiming at saving energy by the efficient use of daylighting.

- Developed a controller for venetian blinds and electric lighting in office buildings using Bayesian machine learning

Apr 00 – Dec 02: Research Assistant, University of Zürich — Responsible for the main antimatter detector on a 40-people research project at CERN.

- Assembled, commissioned, and operated main detector which led to the discovery of cold antihydrogen
- Co-authored several papers, including one in *Nature*

PhD in Physics, EPFL, 2007   **English (C2), French (C2), German (B1), Swedish (C2)**
Master in Physics, EPFL, 2000

Contributor or author of several open-source projects including Apache Spark and CppUTest
Coach for team of 20 kids aged 6–8 at the Plan-les-Ouates Rugby Club