

# Andreas Bloch

## Machine Learning Enthusiast

Computer Scientist **ETH** zürich

«My passion is to solve challenging problems for business and humanity through the power of cutting-edge machine learning technologies.»



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17 May, 1988 📅

linkedin.com/in/andreas-bloch in

andbloch.github.io 🌐

## WORK EXPERIENCE

### Associate IT Consultant

Orbium

10/2013 – 05/2014

Zürich & Berlin

Parametrization of the Avaloq Banking Suite (E-Banking, Output Management) for three major banks in Germany. Requirements engineering in close collaboration with the clients.

Technologies: Avaloq, PL/SQL, XML

### Research Assistant

ZHAW

05/2013 – 07/2013

Winterthur

Continuation of bachelor thesis: Implementation of a system for transportation mode detection (Android app and server app) for SBB and Swisscom. Conduction of software engineering trainings.

Technologies: Java (Spring Framework, WEKA Machine Learning Library), Android (Spring Mobile), MySQL

### Web Developer

ZHAW & Press Play

12/2012 – 02/2013

Winterthur

Implementation of the website for the event and live voting of the Swiss Music Awards of 2013. Desktop and mobile client via responsive design.

Technologies: PHP (Drupal), JavaScript (jQuery), CSS (LESS), HTML

### Junior Software Engineer

Namics

06/2012 – 09/2012

St. Gallen

Internship in software engineering: Integration of a rule-engine into the Swissport Lounge Check-in System.

Technologies: Java (Spring Framework, Hibernate, OpenRules), MySQL, HTML, JavaScript (jQuery)

### Specialist Consumer Finance

Credit Suisse (Bank-now)

05/2008 – 08/2010

Horgen

Customer care for consumer credits in German, French, Italian and English.

### Private Equity Salesman

Conseillers Suisse

11/2007 – 02/2008

Zürich

Cold calling for private equity investments in biodiesel companies.

### Call Agent Outbound

RBC Solutions

01/2007 – 05/2007

Feldmeilen

Cold calling for Schuler wines, Landbote newspapers, AIG insurances.

## SKILLS

Machine Learning

Deep Learning

Data Mining

Recommender Systems

Natural Language Processing

Software Development

Consulting

## CERTIFICATES

Avaloq Certified Professional (2013-2015)

## HONOR AWARDS

ZHAW School of Management and Law  
Dean's list for best graduation in Business Information Technology (09/2013)

## LANGUAGES

English Full Professional Proficiency

German Native Proficiency (Bilingual)

Italian Native Proficiency (Bilingual)

French Full Professional Proficiency

Portuguese Professional Proficiency

## INTERESTS

Kitesurfing

Swimming

Barbecue

Artificial Intelligence

Technology

Mathematics

Socializing

## PUBLICATIONS

### Battery-Efficient Transportation Mode Detection on Mobile Devices

Andreas Bloch, Robert Erdin, Sonja Meyer, Thomas Keller, Alexandre de Spindler, June 2015, 16th IEEE International Conference on Mobile Data Management.

## EDUCATION

### B.Sc. Computer Science (Grade: 5.46/6.0)

ETH Zürich

09/2014 – 09/2019

Thesis: Mixed-Curvature Space Representations for Recommender Systems

Specialization: Elective courses in machine learning, including

- Deep Learning
- Data Mining
- Machine Learning
- Visual Computing
- Probabilistic Artificial Intelligence
- Learning and Intelligent Systems
- Building a Robot Judge

### B.A.Sc. Business Administration (Grade: 5.65/6.0)

ZHAW School of Management and Law

09/2010 – 09/2013

Thesis: Battery-Efficient Transportation Mode Detection on Mobile Devices

Specialization: Business Information Technology

### High School Diploma

High School of Küsnacht

08/2002 – 08/2006

Linguistic profile (Italian)

**ETH** zürich

**zhaw**  
School of  
Management and Law

**KANTONSSCHULE**  
**KÜSNACHT**

## PERSONAL PROJECTS

- **Open-Source Contribution:** Of  $\kappa$ -Stereographic Model to the geometric optimization library [geoopt](#).
- **Machine Learning Blog:** Publication of several blogposts about topics in ML on [andbloch.github.io](#).
- **Continuous Learning:** Regularly updating ML skills through research papers and online courses.

## IT SKILLS IN DETAIL

Technology	Experience
<b>Python</b> Pytorch, Tensorflow, Keras, Sklearn, Spacy, Numpy, Pandas, Matplotlib	3 years
<b>Java</b> Spring, Hibernate, Android, Maven	3 years
<b>C++, C, x86 Assembly</b> Eigen, OpenCV, OS Kernel Modules, IDA, GDB	1 year
<b>Matlab</b>	2 years
<b>MySQL, PostgreSQL, PL/SQL</b>	4 years
<b>Amazon Web Services</b>	2 years
<b>Linux, Unix</b>	6 years
<b>PHP, HTML, CSS &amp; JavaScript</b> Wordpress, Drupal, NodeJS, jQuery, Angular, WebGL, Sass	5 years
<b>Haskell</b>	½ year