Andreas Bloch

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SHORT PROFILE

Originally, I studied Business Information Technology at ZHAW and then worked as a Software Engineer and IT Consultant. My passion for machine learning then motivated me to take a leap of faith and pursue a further Bachelor in Computer Science at ETHZ. During my time at ETHZ I had the chance to attend several master-level machine learning courses (see list below). Also, my thesis allowed me to intensively study and apply recommender systems for half a year. I recently graduated and so, here I am now, ready and eager to start my career in software engineering and applied machine learning.

EDUCATION

B.Sc. Computer Science – ETH Zürich [5.46/6.0]

09/2014 – 09/2019

Thesis: Mixed-Curvature Space Representations for Recommender Systems (5.75)

Specialization: Elective courses in machine learning:

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

* = Master-level courses

B.A.Sc. Business Administration – ZHAW SML [5.65/6.0]

09/2010 – 09/2013

Thesis: Battery-Efficient Transportation Mode Detection on Mobile Devices (6.0)

Specialization: Business Information Technology

Honor Award: Best graduation in Business Information Technology

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 (Certified Professional 2013 – 2015), PL/SQL, XML, VBA

Research Assistant – ZHAW

05/2013 – 07/2013   *Winterthur*

Continuation of bachelor thesis: Implementation of a system for transportation mode detection on mobile devices for SBB and Swisscom. Conduction of trainings on the Spring framework for the research assistants of the department.

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

Web Developer – ZHAW & Press Play

09/2012 – 06/2013   *Winterthur*

Integration Seminar: Implementation of the entire website for the event and live voting of the Swiss Music Awards of 2013 in a team of four students. Desktop and mobile client via responsive web design. Conduction of web development trainings for the upcoming students of the following year.

Technologies: PHP (Drupal), JS (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. Training of client for the recording of rules into the rule-engine.

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

Specialist Consumer Finance – Credit Suisse

05/2008 – 08/2010   *Horgen*

Customer care for consumer credits in German, French, Italian and English. Opportunity to participate in the testing of new software releases.

SKILLS

Machine Learning,   Data Science,

Deep Learning,   Recommender Systems,

Natural Language Processing,   Data Mining,

Computer Vision & Graphics,   IT Consulting,

Software Architecture & Development

IT SKILLS IN DETAIL

Python
Pytorch, Tensorflow, Keras, Sklearn, Spacy, Numpy, Pandas, Matplotlib

C++, C, x86 Assembly, CUDA, OpenCL
OpenCV, Eigen, CUDA & OpenCL Kernels, MPI, OpenMP, OS Kernel Modules, IDA, GDB,

Java
Spring, Hibernate, Android, Maven

Matlab

SQL, PL/SQL, Neo4j, Redis

Amazon Web Services, Azure, Google Cloud

Linux, Unix, Windows

PHP, HTML, CSS & JavaScript
Wordpress, Drupal, NodeJS, jQuery, Angular, WebGL, Less, Sass

Haskell

PERSONAL PROJECTS

Open Source Contribution: of κ-stereographic model to the geometric optimization library geoopt (Pytorch).

Machine Learning Blog: on andbloch.github.io Publication of several articles on recommender systems and optimization.

Volunteering AI Consultant: at openconsulting.ai Non-profit consulting for NGOs in various areas of machine learning.

Continuous Learning: Regularly updating machine learning skills through reading of research papers and attending of meetups and online courses.

LANGUAGES

English	*Full Professional Proficiency*
German	*Native Proficiency (Bilingual)*
Italian	*Native Proficiency (Bilingual)*
French	*Full Professional Proficiency*
Portuguese	*Professional Proficiency*

INTERESTS

Kitesurfing, Swimming, Artificial Intelligence, Technology, Mathematics, Socializing