# STEPHAN RABANSER

 $\gg$  +49 (0)157 31765174 —  $\bowtie$  steve@steverab.com —  $\cong$  steverab.com, home.cs.tum.edu/~rabanser Einsteinstraße 3 — Garching bei München, Bavaria 85748 — Germany

#### **EDUCATION**

M.Sc. in Computer Science

October 2015 – September 2018 (exp.)

Munich, Germany

Honours Degree in Technology Management

August 2015 – September 2018 (exp.)

Center for Digital Technology and Management (CDTM)

Munich, Germany

Technische Universität München (TUM) Ludwig Maximilians Universität (LMU)

Technische Universität München (TUM)

Visiting Research Student

February 2016 – June 2016

Massachusetts Institute of Technology (MIT)

Cambridge, MA, USA

B.Sc. in Computer Science, Minor in Economic Sciences

October 2012 – October 2015 Munich, Germany

Technische Universität München (TUM)

Higher Education Entrance Qualification (A-levels) Technologische Fachoberschule "Max Valier" September 2007 – July 2012 Bolzano, Italy

Internships

## Intern Software Development Engineer

August 2017 – October 2017

Amazon - Core Machine Learning Team

Berlin, Germany

- Received an overview of standard time series analysis / forecasting techniques.
- Implemented Bayes by Backprop (weight uncertainty estimation) for standard MLPs and RNNs in MXNet.
- Contributed two chapters to upcoming MXNet book.

### Intern Software Development Engineer

July 2016 – October 2016

. R

Amazon Web Services (AWS) - OpsWorks Team

Berlin, Germany

- Developed internal business intelligence tool (business metrics reporting and automated dashboard generation) for new OpsWorks service offering (OpsWorks for Chef Automate).
- Gained deep insights into a broad range of AWS products and large-scale software development at Amazon.

#### AWARDS & HONORS

#### Elite Network of Bavaria

April 2016

Member

Munich, Germany

### Apple Worldwide Developers Conference (WWDC)

June 2013

Student Scholarship Recipient

San Francisco, CA, USA

- Developed résumé iOS app to highlight academic and professional experience as well as hobbies.
- Got awarded a free WWDC ticket.

### Stripe Capture the Flag

February 2012

Hacking Contest Participant

World Wide Web

• One out of 250 people, who successfully hacked themselves through Stripe's "Capture the Flag" contest.

### Publications

• CDTM Class of Fall 2015. 2015. Entrepreneurship in Bavaria. Center for Digital Technology and Management.

### TECHNICAL STRENGTHS

Programming Languages

Java, Python, Swift, Ruby, C, HTML5/CSS3/JS

ML Frameworks MXNet, Tensorflow

Tools Git, IDEA Suite, Xcode, Sketch

### LANGUAGES

German Native
English Fluent, TOEFL iBT 104 (October 2014)

Italian Proficient

### Data Science in Astrophysics and Industry

Max Planck Institute for Astrophysics

March 2017 – November 2017 (exp.) Garching, Germany

My tasks in this project include (but are not limited to):

- Transform an existing Gaussian Mixture Model into Google Tensorflow.
- Optimize the algorithmic implementation of the model (e.g. number of mixture components, hyper-parameters).
- Find a good approximation of the used density matrix using sparse matrices.
- Explore different training methods (stochastic vs. deterministic and EM vs. gradient descent vs. Newton).
- Determine parallelizable operations and to which extend sync points are needed.

### Stylight Now, Tech Lead

October 2015 – January 2016

Munich, Germany

Managing Product Development - CDTM

- Developed a simple and easy direct checkout solution for the fashion aggregator Stylight to raise the conversion rate throughout their platform, but especially in their apps.
- Created iOS app (UI/UX + code) which will be further refined by Stylight and eventually incorporated into their live platform.
- Got hands on experience with business development strategies, user and market research, project management, and collaboration in a diverse team.

### Practical Course Coach (iPraktikum – Bosch Dots)

October 2015 - January 2016

Advanced Project Management - Chair for Applied Software Engineering

Munich, Germany

- Team coach for the Robert Bosch GmbH team as part of the iOS Praktikum WS 15/16.
- Developed a system that helps Bosch with matching active but also potential new suppliers to current Bosch projects in a smart and easy way.
- Cross-team modeling, architecture, and documentation instructor.

### Spot.io, Bird Classifier

October 2015 - December 2015

Deep Learning Elective - CDTM

Munich, Germany

- Gained insights into the basics of applied machine learning and deep learning algorithms, frameworks, and techniques.
- Trained multiple convolutional neural network by using Nvidia Digits and Caffe for different kinds of birds.
- Developed a classification pipeline for handing over images from a broadly trained network for general bird clusters to more granular networks for specific bird species.

### Teaching Assistant

August 2014 – November 2014

Swift Introduction Course - Chair for Applied Software Engineering

Munich, Germany

- Held a 2h talk and prepared the corresponding tutorial about RESTful interaction with web services within iOS and OS X apps.
- Developed a course-matching sample API by using Java technologies (Maven, Glassfish, Jersey, JPA).
- Supported course administration by writing and reviewing course assignments.
- Highlighted by Apple as one of the first Swift courses at major universities.

#### Personal Projects

Tranzport

May 2015

Munich, Germany

macOS Application & API

Startup & iOS Application

- Developed JSON API to interact with Munich's public transportation system by using Ruby Sinatra.
- Developed corresponding macOS status bar application to display departures for any station in Munich.

### Multiply & Hours

January 2014 – September 2014 Munich, Germany & Berlin, Germany

• Essential member in the establishment of a startup named Multiply at a very early stage.

- Mainly responsible for calendaring and time-management app Hours for iOS.
- Left Multiply in order not to loose focus on my academic career.

### Apfeltech

September 2010 - May 2014

World Wide Web

German Tech Blog

- Headed daily business as Editor-in-Chief from 2011 to 2012.
- Helped coding key parts of the website.