## Benjamin Gallusser

Machine Learning Enthusiast



### **Education**

**2016 – 2019 M.Sc. Computer Science** 

ETH Zürich

at the #2 CS department worldwide (THE ranking 2019)

GPA: 5.2 on a scale from 6 (excellent) to 1 (failure)

Master's thesis with Jan Funke at Janelia Research Campus, USA

2012 - 2016 B.Sc. Informatics

TU München

GPA: 1.7 on a scale from 1 (excellent) to 5 (failure)

Student exchange (two semesters) at Universidad Austral de Chile

2011 German high school diploma (Abitur)

Gymnasium Penzberg

GPA: 1.0 on a scale from 1 (excellent) to 6 (failure)

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 LinkedIn
 GitHub

#### Coding skills

Python
C++, C
Java, Matlab, JS
ML: Pytorch, Tensorflow
web: Django, Typo3

## Personal info

date of birth 03 Apr 1993

nationalities CH, GER, USA

#### languages native

fluent & 4 proficient Intermediate

#### interests

complex board games creating & playing music competitive sports

## Selected academic projects

- **Graph Neural Networks** (Master's thesis) for supervoxel agglomeration in a 3d neuron reconstruction pipeline, working with terabytes of electron microscopy images
- Generative Adversarial Networks of for document style transfer, using Machine Learning to change a PDF document layout while keeping the text
- Interdisciplinary analysis of the legal, economic, ethical and political implications of the big data revolution in a four-months seminar
- Single-core high performance implementation 
   ✓ of Latent Dirichlet Allocation in C
   (11x speedup compared to the author's C implementation)
- Chatbot C capable of conducting a casual conversation, trained on movie conversational data based on seq2seq and MMI cost function
- **Deep Learning** (Bachelor's thesis) for Recognition of Protein Domains from Contact Maps, simplifying a step in a protein structure prediction pipeline
- Sentiment Classification of Tweets using an LSTM network (87% accuracy)

## **Working experience**

Nov'18 – Feb'19 Data Science Consulting Intern

McKinsey & Company

working on Predictive Maintenance systems and Advanced

Analytics studies & capability building

Oct'17 – Jul'19 Teaching Assistant for Advanced Machine Learning

ETH Zürich

creating and holding large tutorial sessions (~100 participants) & project supervision for the CS Master's courses Natural Language

Understanding and Advanced Machine Learning

Nov'16 - Mar'18 Research Assistant

Institute for Machine Learning, ETH Zürich

- collaborating on sleep stage classification based on CNN and HMM with accuracy comparable to human experts;
   publication in PLOS Computational Biology
- full design, development and system administration of the web service ☑; collaborators upload large sleep signals, which are evaluated on GPU.

Jul'13 – Oct'13 Back-end developer (internship)

Datamints GmbH

- developing internal project status presentation software for weekly team meetings
- side project: Chrome add-on to combine online search with searching the company's knowledge base

Sep'11 - May'12 Warehouse Associate (internship) Klüber Lubrication North America

introduction to logistics, supply chain management

and customer support