Curriculum Vitae

Maurice Frank





EDUCATION

2018-2020 M.Sc. Artificial Intelligence Universiteit van Amsterdam, Vrije Universiteit Amsterdam

{Deep, Machine, Reinforcement} Learning, Sound processing, Computer Vision

Thesis: We are conducting research on using VAEs and unsupervised representation learning

for topics in Music Information retrieval (including source separation).

Supervisor: Maximilian Ilse, AMLab

Python / PyTorch

B.Sc. Applied Computer Science 2014-2017

University Heidelberg

Focus: Image processing and pattern recognition

GPA 3.48/4

Thesis: Using a FCN-ResNet based detector the thesis provides a reverse image search tool here in particular to retrieve art historic images containing an object given by a reference image.

Supervisor: Dr. Miguel Bautista Martin, Prof. Dr. Björn Ommer

Python / Caffe / Keras

B.Sc. Physics 2013-2014 **University Heidelberg**

Change of degree after the second semester, kept as minor studies

EXPERIENCE

Teaching Assistant – IR 02/2020-Universiteit van Amsterdam

04/2020 TA for the masters course Information Retrieval I.

01/2020-**Teaching Assistant - FACT** Universiteit van Amsterdam

02/2020 TA for the masters course Fairness, Accountability, Confidentiality and Transparency in AI.

Python / PyTorch

06/2019-Internship - AI for production control **BMW Group, Munich**

08/2019 Worked within the engine development department. Building statistical models to analyze engine

> part quality and live fleet monitoring. Building a production ready data visualization app. Python / PySpark / Palantir Foundry / PostgreSQL / Dash / Agile development

Full-stack Web developer 04/2018-Bürgerwerke eG, Heidelberg

08/2018 Ground up development of a communication and organization web portal in Ruby on Rails. Backend

and Frontend work, idea to finish.

Rails / Ruby

09/2016-Laboratory admin Alfred-Weber-Institute for Economics, Heidelberg

06/2017 Administrator in the behavior Economics computer lab. Development of an experiment administra-

tion software.

Rails / Ruby / Python

10/2015-**Teaching Assistant University Heidelberg**

02/2016 Self-prepared weekly training classes for course practical computer science.

C++

06/2015-**CO-Founder / Voluntary work** Collegium Academicum, Heidelberg

> Student-founded non-profit company building sustainable student housing. We are building an innovative living space for 200 young people. Creating an educational center for holistic self-learning.

team building / lead generation / design work / writing grant applications

ACADEMIC INTERESTS

LANGUAGES

HOBBIES

My interests lie in machine espe- **German** — native ested in generative modelling and **Persian** — learning Bayesian methods. Applications to music and sound. Understanding of perception.

climbing, mountaineering, cially deep learning. I am inter- English — proficient (TOEFL 112/120) tronic music production