## Patrick Deutschmann

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### **Experience**

#### **Machine Learning Engineer**

Working remotely from Graz, Austria

Dedalus HealthCare

Developing machine learning models for predicting the risk of adverse events in hospitals

- Researching NLP in the health care domain
- · Maintaining MLOps pipelines and CI/CD

#### Research Intern / NLP Deep Learning Researcher

Paris, France

Buster.Ai

07/2021 - 04/2022

09/2022 - Current

- Stayed up to date with state-of-the-art research papers on machine learning (especially NLP) and presented new developments to the team
- · Surveyed and experimented with more efficient Transformers and multi-modal models for fact-checking applications
- Built information retrieval, semantic search and natural language understanding pipelines using Python, PyTorch, Hugging Face Transformers,
   Deepset Haystack and PyTorch Lightning
- Followed clean coding practices with automated tests, code review and CI/CD on GitLab

#### **Full Stack Software Developer**

Graz, Austria

All for One Group (20h/week)

08/2017 - 05/2021

- · Developed web apps and data integration pipelines
- Consulted customers and held workshops to create tailored solutions
- Deployed and monitored solutions in cloud environments (AWS, Azure, SAP BTP)

### **Education**

Computer Science (MSc)

Graz, Austria

Graz University of Technology

2019 - 2022

- · Majored in machine learning with courses on statistics, deep learning, ML Ops, natural language processing (NLP) and computer vision
- Passed with distinction (grade average: 1.1 where 1.0 is best and 5.0 is worst)
- Thesis: More is More: An Analysis of Using Efficient Transformers for Fact-Checking (written while employed at Buster.Ai, see above)

**Exchange semester**Compiègne, France

Compiègne University of Technology (Alliance Sorbonne Université)

2020

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• Exchange semester with courses on optimization, decision theory and deep learning

#### **Business Administration (BSc)**

Graz, Austria

University of Graz

Majored in Banking and Finance
Thesis: Sentiment for Price Prediction (SePP): Predicting Stock Performance Based on Tweets

# Software Engineering (BSc)

Graz. Austria

Graz University of Technology

2016 - 2019

- Passed with distinction; on dean's list of top 5% of students every time since its inception
- Thesis: Security Aspects of Container Orchestration (Kubernetes and Docker security)

### **Projects**

#### **Dependable Classification**

Siemens Al-DA

- Won a prize in a challenge to reliably solve a safety-critical classification problem
- · Developed a deep neural network that provides guarantees for local robustness using perturbation analysis based on linear relaxation

#### **Modelling Air Pollution**

Graz University of Technology

· Built an interpretable graph neural network that predicts air pollution based on weather data

### Languages

English fluent
German native
French confident

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