Matthias **Bachfischer**

Curriculum Vitae

Munich, Germany

(+49) 151 10815142 | bachfischer.matthias@googlemail.com | bachfischer.me | Bachfischer | Bachfischer

Summary

I have over 4 years of experience as a Data Scientist and IT architect in the consulting industry. My expertise is in building highly scalable architectures for machine learning and analytics services as well as the teams and culture around that.

Work Experience

BCG Platinion   *Munich, Germany*

Senior IT Architect   *Oct. 2023 - Jul. 2024*

- Led the technical design and development activities for the implementation of three Generative AI use cases in the procurement department of a leading Automotive OEM (AWS, Python, OpenAI, LangChain)
- Developed the concept for optimization of heating systems via Machine Learning algorithms at a startup in the energy sector (AWS, Python)

IBM   *Munich, Germany*

Senior Data Scientist   *Sep. 2022 - Oct. 2023*

- Designed and implemented various highly-scalable machine learning services using Transformer-based models for computer vision and natural language processing tasks (Python, PyTorch)
- Developed a semantic search engine for querying a large multilingual corpus of PII data at a federal agency (Python, PyTorch)

BCG Platinion   *Munich, Germany*

Senior IT Architect   *Feb. 2022 - Aug. 2022*

- Designed and led the development of a cloud-based data platform to host machine learning services for energy grid data (Azure, Python)
- Conducted a vendor due diligence assessment of the IT architecture and data platform of a leading payments company

BCG Platinion   *Munich, Germany*

IT Architect (& Visiting Associate)   *Jul. 2018 - Mar. 2020*

- Designed and led the implementation of a real-time data analytics platform to process streaming data from connected cars (AWS, Python)
- Implemented a highly-scalable DevOps pipeline for very large software development teams (AWS, Kubernetes, Python)
- Developed a target IT architecture to facilitate the implementation of manufacturing analytics use cases for a large automotive supplier

King Abdullah University of Science and Technology (KAUST)   *Thuwal, Saudi-Arabia*

Visiting Student   *Apr. 2018 - Jul. 2018*

- Performed research on applying machine learning techniques to classify toxic comments in online social networks (Python, Tensorflow)

KRONES   *Neutraubling, Germany*

Integrated degree program - Information Systems   *Jul. 2013 - Feb. 2018*

- Led a company-wide initiative to leverage sensor data from machinery for predictive maintenance (Azure, Apache Hadoop, Python)

Education

The University of Melbourne   *Melbourne, Australia*

M.Sc. in Data Science - GPA: 3.9/4.0   *Mar. 2020 - Dec. 2021*

- Developed a Pacman agent based on deep reinforcement learning (top 5% rank in university-wide competition) (Python, Tensorflow)
- Title of final thesis: Adversarial Workload Matters - Executing a Large-Scale Poisoning Attack against Learned Index Structures (C++)

Universidad de Buenos Aires   *Buenos Aires, Argentina*

Licenciatura en Análisis de Sistemas - Overall grade: 10/10   *Mar. 2016 - Jul. 2016*

- Completed a semester abroad as an exchange student in the Faculty of Engineering (Facultad de Ingeniería)

Ostbayerische Technische Hochschule Regensburg   *Regensburg, Germany*

B.Sc. in Business Information Technology - GPA: 4.0/4.0   *Oct. 2014 - Feb. 2018*

- Evaluated the feasibility of using machine learning to perform intrusion detection in onboard vehicle networks (Python)
- Title of final thesis: Success Factors in Business-Managed IT

Honors & Awards

2016 **Scholarship**, German Academic Scholarship Foundation (1% acceptance rate) *Bonn, Germany*
2020 **Study Abroad Scholarship**, German Academic Exchange Service *Bonn, Germany*

Publications

Success Factors in Business-Managed IT *Berlin, Germany*
SKILL - Studierendenkonferenz Informatik *Sept. 2018*
- Presented a research paper from a case study analysis of critical success factors in Business-Managed IT / Shadow-IT

Offensive Comment Classification on German Language Microposts *Vienna, Austria*
GermEval 2018 - Shared Task on the Identification of Offensive Language *Sept. 2018*
- Presented the participation of the KAUST MINE Lab for machine intelligence at the GermEval 2018 shared task

Languages

German, maternal language *native speaker*
English, excellent command *Level C2 (CEFR)*
Spanish, very good command *Level C1 (CEFR)*
Portuguese, good command *Level B2 (CEFR)*
Arabic, working knowledge *Level A2 (CEFR)*