Matthias **Bachfischer**

Curriculum Vitae

Munich, Germany

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Summary

Results-driven IT Architect and Data Scientist with 5+ years of experience architecting enterprise-scale ML solutions and leading technical teams across automotive, energy, and federal sectors.

Work Experience

E.ON Digital Technology *Munich, Germany*

Senior AI Solution Architect *Sep. 2024 - Present*

- Led foundational AI/ML infrastructure development, design and implementation of end-to-end AI solutions
- Spearheaded collaboration with business stakeholders to architect and optimize AI solutions

BCG Platinion *Munich, Germany*

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

- Led the development of three Generative AI use cases in the procurement department of a leading automotive OEM to reduce offer processing time by >50% (AWS, Python, OpenAI, LangChain)
- Developed the concept for optimizing the energy usage of connected 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*

- Engineered highly-scalable machine learning services using Transformer-based models for computer vision and natural language processing tasks (Python, PyTorch, FastAPI)
- Architected 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*

- Orchestrated the development of a cloud-based data platform to host machine learning services for energy grid data (Azure, Python)
- Executed a vendor due diligence 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)
- Architected a highly-scalable DevOps platform for containerized deployments based on Jenkins for very large software development teams (AWS, Kubernetes)
- Designed 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*

- Investigated the application of 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

Publications

Success Factors in Business-Managed IT *Berlin, Germany*

SKILL - Studierendenkonferenz Informatik *Sep. 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 *Sep. 2018*

- Presented the participation of the KAUST MINE Lab for machine intelligence at the GermEval 2018 shared task

Honors & Awards

2016 **Scholarship**, German Academic Scholarship Foundation (1% acceptance rate) *Bonn, Germany*

2020 **Study Abroad Scholarship**, German Academic Exchange Service *Bonn, Germany*

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)*