Marcel Gino Faizi

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EDUCATION

Technical University of Darmstadt

Master of Science in Computer Science, Minor in Entrepreneurship & Innovation

Darmstadt, Germany

Oct. 2021 - Oct. 2024

Goethe University

Bachelor of Science in Computer Science, Minor in Economics

Frankfurt am Main, Germany

Oct. 2018 - Oct. 2021

EXPERIENCE

Data Scientist (Part-time)

Dec. 2022 – Present

Inkubator 100 Plus GmbH & Co KG

Darmstadt, Germany (Hybrid)

- Develop and maintain a platform for managing stock portfolios with various strategies
- Conduct comprehensive data analysis using numpy, pandas, and sklearn
- Collaborate on full-stack development, including web interface and backend systems
- Manage Linux servers and infrastructure to support the platform

Publications

$Korrelations analyse \ von \ Kryptowährungskursverläufen \ basierend \ auf \ Tweet \ Sentiment-Analysis$

Bachelor Thesis

- Analyzed 4.6 million English tweets containing the keyword "Bitcoin"
- Investigated the relationship between tweet sentiment and Bitcoin returns
- Evaluated and optimized various text classifiers, including CNN and Transformer-based models
- Constructed a meta-model outperforming other models in tweet sentiment classification
- Examined the influence of tweet and author characteristics using distance correlation

Projects

${\bf GerLegalIR:\ German\ Legal\ Information\ Retrieval\ System}|\ {\it Python,\ PyTorch}$

Feb. 2024 – Aug. 2024

https://github.com/MarcelFaizi/gerlegalir

- Developed a comprehensive IR system for German legal documents, implementing TF-IDF, BM25, and neural
 approaches
- Utilized advanced NLP techniques including bi-encoders and cross-encoders for improved retrieval accuracy
- Implemented and evaluated multiple retrieval methods, including pretrained, finetuned, and ensemble systems
- Designed a flexible architecture allowing easy integration of new retrieval methods
- Utilized MongoDB for efficient storage and retrieval of evaluation results

TextImager: UIMA-based NLP Framework | Java, JavaScript, UIMA

July 2021 – Sept. 2021

https://github.com/texttechnologylab/textimager-uima

- Contributed to the development of an advanced UIMA-based framework for natural language processing
- Expanded UIMA backend functionality, improving system flexibility and scalability
- Integrated additional NLP components, broadening the system's analytical capabilities
- Refined web-based frontend to make complex NLP tasks accessible to non-technical users

TECHNICAL SKILLS

Languages: Python, Java, C++, SQL, JavaScript, HTML/CSS

Frameworks & Libraries: PyTorch, TensorFlow, Huggingface, LangChain, NLTK, spaCy, numpy, pandas, sklearn, seaborn, matplotlib, Selenium, BeautifulSoup, Pillow, Django, FastAPI, Spring Boot, React

Tools & Technologies: Git, Docker, Linux, AWS, Azure, MongoDB, VS Code, PyCharm, IntelliJ, Jira, Trello

Areas of Expertise: Full-Stack Development, Agile Development, Data Analysis, Machine Learning, Natural Language Processing, DevOps, Cloud Computing

2022