Heye Vöcking - Senior Data Engineer

Berlin, GER | www.heye.dev | linkedin.com/in/hvoecking | github.com/hvoecking

SUMMARY

Senior Knowledge Engineer with more than ten years of experience in building high-throughput data systems and AI-driven products. Proven record designing scalable knowledge graphs and stress-testing LLM safety. Comfortable leading technical discussions and translating research innovation into deployed solutions.

CORE SKILLS

Programming & AI: Python, Prompt & Context Engineering, LLM stress-testing, Knowledge Graph Modeling.
Infrastructure & DevOps: REST APIs, Docker, Kubernetes, Azure, CI/CD.

PROFESSIONAL EXPERIENCE

GROPYUS — $100M Series B startup constructing modular timber buildings, leveraging a digital value chain.
Senior Knowledge Engineer/Senior Data Engineer | Berlin, Germany | April 2020 - Present.

• Built an LLM-powered interface reducing querying of a million-triple knowledge graph from hours to minutes.

• Developed life cycle assessment automation that secured government funding for sustainable projects.

• Established a graph infrastructure with RDF4J and GraphDB supporting multi-tenant deployments.

• Mentored on prompt engineering and safe LLM usage guidelines.

STRÖER Labs (formerly **mbr targeting**) — A leading German advertiser using ML-optimized RTB strategies.
Senior Data Engineer | Berlin, Germany | June 2013 - March 2020.

• Architected a real-time bidding (RTB) stack processing >100k HTTP requests per second.

• Managed a petabyte data lake and built Spark-based analytics that informed campaign optimization.

• Delivered customer reporting pipelines that cut manual effort from four hours to under five minutes per week and eliminated the main source of human error from the workflow.

INDEPENDENT AI SAFETY WORK | 2023–Present

• Created reproducible jailbreaks against Claude 3 and other frontier models. Currently coordinating responsible disclosure and verified vendor mitigations.

SELECTED PROJECTS

ChatGDT — Natural Language Interface for Knowledge Graphs | Blog Post
Developed LLM-powered SPARQL query generation system, leveraging prompt engineering and AI agents. (Additional parts currently under internal IP review).
Understanding Superposition in Neural Networks | Blog Post
Technical article explaining mechanistic interpretability concepts through analogies, demonstrating ability to communicate complex AI research to technical audiences.
Bluestreak — Tracking-Free In-Browser User Segment Prediction | DOI (all versions)
Built a client-side logistic-regression pipeline outperforming User-Agent segmentation without cookies.

EDUCATION

Technical University of Berlin (TU Berlin) | Berlin, Germany | GPA 1.0 *(German scale: 1.0 best / 5.0 fail)*
M.Sc. Computer Science—Focus: cognitive systems and quantum computing.
上海交通大学 Shanghai Jiao Tong University (SJTU) | Shanghai, China | Exchange semester
M.Sc. Computer Science—Focus: microservices and distributed systems.
University of Hamburg (UHH) | Hamburg, Germany | GPA 1.6 *(German scale: 1.0 best / 5.0 fail)*
B.Sc. Informatik (Computer Science)—Focus: machine learning and algorithms.

LANGUAGES

German native • **English** fluent • **Chinese** intermediate.

COMMUNITY AND VOLUNTEERING

Supervisor for inclusive sailing expeditions and volunteer teacher at TCDF Thailand.