

Florian Kark

Ph.D. Artificial Intelligence for Material Science, [Max Planck Institute for sustainable Materials](#)
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Education

Max Planck Institute for sustainable Materials Düsseldorf, Germany
Ph.D. in Artificial Intelligence for Material Science June 2026 – Present
Advised by [Dierk Raabe](#)

Heinrich-Heine-University Düsseldorf Düsseldorf, Germany
M.Sc., Artificial Intelligence and Data Science Mai 2026
Thesis: Spatial-Context-Aware Machine Learning for Pore Morphology in L-PBF Metals
Advised by [Jaemin Wang](#) and [Anurag Bajpai](#)

B.Sc., Computer Science December 2023
Thesis: Determining Check-Worthiness of Tweets with Multimodal Content
Advised by [Stefan Dietze](#)

Industry Experience

Capgemini Düsseldorf, Germany
AI Consultant & Engineer (Lead Consultant since January 2025) January 2024 – June 2026

- Building efficient, scalable, production-ready AI frameworks running on the Cloud for clients in automotive, manufacturing, public and logistics sectors.
- Leading discovery, research and implementation of evaluation of LLM, RAG and Agentic applications.
- Solution Lead role in Proposals/Bids for client acquisition.

Working Student October 2020 – October 2022

- Worked on Knowledgebase optimization and automation of KPI and Defects controlling and reporting of one of the largest German Logistics Companies.

Research Experience

Max Planck Institute for sustainable Materials Düsseldorf, Germany
Student Researcher January 2025 – June 2026

- Working with Anurag Bajpai, Jan Janssen, Jaemin Wang and Dierk Raabe on Machine Learning in Metallurgy. Research collaboration with Citrine Informatics for AI in Corrosion Data.

Capgemini Cologne, Germany
Student Researcher October 2022 – December 2023

- Leading research team of 5 for the largest home appliance manufacturer in Europe. Implementing multimodal hierarchical embedding clustering and topic modeling with LLM driven active learning on extremely sparse big data.

Skills & Interests

Technical: Python, Java, C, PyTorch, TensorFlow, JAX, Hugging Face Transformers, NumPy, CUDA, Jupyter, Weights & Biases, MLflow, Git, CI/CD (GitHub Actions / Jenkins), Docker, Kubernetes, Slurm, Linux, AWS, SQL, LaTeX

Language: German (Native), English (C2), French (B1)

Interests: Sports (mostly weights and running), traveling & exploring new places and activities (i.e. the best food spots in Düsseldorf), Bonsai, and Chess (my favorite is Fischer Random Chess)