Mika Senghaas

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EDUCATION

École Polytechnique Fédérale de Lausanne, *MS in Data Science, GPA: 5.8/6.0*   Lausanne, CH, 2023 – 2025
- Honors: EPFL Excellence Master Fellowship (Awarded to ¡1% of students)
- Selected Coursework: ML, Modern NLP, Advanced Algorithms, Distributed Algorithms

IT University of Copenhagen, *BS in Data Science, GPA: 11.4/12.0 (Top 1%)*   Copenhagen, DK, 2020 – 2023
- Selected Coursework: ML, Linear Algebra, Optimization, Algorithms, Applied Statistics
- Volunteering: Student Ambassador, Co-Founder AITU Student Group

Gymnasium Rissen, *High School, GPA: 1.0 (864/900) (Top 1% National)*   Hamburg, DE, 2011 – 2019

RESEARCH EXPERIENCE

EPFL, *Research Assistant for Prof. Anne-Marie Kermarrec (SaCS, EPFL)*   2024
- Researching student working on algorithmic improvements for decentralized pre-training of LLMs

EPFL, *Research Assistant for Prof. Robert West (DLAB, EPFL)*   2023 – 2024
- Research assistant on project MegaBites led by Prof. Robert West and Giuseppe Russo, targeting a 33% reduction in EPFL's food carbon footprint using methods from computational social science

RESEARCH OUTCOME

PRIME-RL: Async RL Training at Scale (Accepted at NeurIPS 2025 workshop)   2025
- An open-source framework for large-scale reinforcement learning (RL)
- Links: GitHub, Paper (*Coming*)

SYNTHETIC-2: Scaling Distributed Synthetic Data Generation for Verified Reasoning   2025
- Open-source reasoning dataset collaboratively generated through pipeline-parallel decentralized inference.
- Links: Blog, Thread, HuggingFace

INTELLECT-2: A Reasoning Model Trained Through Globally Decentralized Reinforcement Learning 2025
- Reasoning model trained via large-scale permissionless, decentralized reinforcement learning across the globe
- Links: Paper, Blog, HuggingFace

DiLoCo-SWARM: Towards Scalable Decentralized Training Across the Globe   2024
- A decentralized pre-training method merging ideas from DiLoCo and SWARM
- Links: Paper, GitHub

CNNs for Style Transfer of Digital to Film Photography   2021
- Deep neural networks for style transfer, reproducing analog film texture and tone from digital inputs.
- Links: Paper, GitHub

Advancing Homepage2Vec with LLM-Generated Datasets for Multilingual Website Classification   2023
- Enhanced website embeddings using synthetic web data generated by large language models.
- Links: Report, GitHub

Benchmarking SOT Feature Transform for Biomedical Few-Shot Learning Tasks   2022
- Evaluated SOT features on low-sample biomedical image classification benchmarks.
- Links: Report, GitHub

WORK EXPERIENCE

Prime Intellect, *AI Research Engineer Intern*   2025
- Core maintainer of open-source superintelligence stack, including prime-rl, verifiers and the Environment Hub
- Responsible for post-training pipeline to build frontier reasoning model

IT University of Copenhagen, *Teaching Assistant*   2021 – 2023
- 2021: Introduction to Data Science and Programming
- 2022: Applied Statistics, Algorithms % Data Structures, Linear Algebra and Optimization, Machine Learning, StudyLab
- 2023: Applied Statistics, Data Visualization, StudyLab

FC St. Pauli, *Youth Professional Football Player*   2014 – 2019
- Competed in Germany's premier youth football leagues, advancing from U12 to U19 at FC St. Pauli
- Selected for the extended squad of the German national youth team during U15 to U17 levels

OTHER SKILLS

Languages: German, English, Danish, (Spanish), (French)
Sports Football (Ex-Professional Youth Player), Running (2 Marathons, 1 Half-Marathon)