

Diyar Taskiran

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MSc student in computer science at UZH, researching recurrent abstract reasoning models.

Education

University of Zurich (UZH), MSc Computer Science (GPA: 5.3/6). Sep 2023 – Expected Dec 2026
University of St. Gallen (HSG), BA Business Administration (GPA: 5.4/6). Sep 2018 – Mar 2022

Publications

Schürholt, K., **Taskiran, D.**, Knyazev, B., Giró-i-Nieto, X., & Borth, D. (2022). Model Zoos: A Dataset of Diverse Populations of Neural Network Models. *Advances in Neural Information Processing Systems*, 35, 38134–38148. Datasets and Benchmarks Track. [NeurIPS](#) | [arXiv:2209.14764](#)

Research Experience

Limits of Recurrent Reasoning – *Master's Thesis, Prof. Wattenhofer (DISCO, ETH Zurich)* 2026
– Building N-Queens completion tasks with complexity measures to make variable-difficulty datasets.
– Benchmarking recurrent TRM models to find failure thresholds relative to instance complexity.
– Evaluating generalization to high-complexity datasets and hyperparameters' effects on performance.
– Comparing directed model paths through solution space to detect patterns determining success.

Synthesizing CTs for Radiotherapy – *Master's Group Project, Prof. Günther (AIML, UZH)* 2025
– Built latent diffusion MRI-to-CT synthesis, achieving 159 HU MAE on SynthRAD2025 validation set.
– Adapted NVIDIA's MAISI 3D VAE to enable full-volume scan processing within 16 GB VRAM.
– Evaluated against latent diffusion, image-space diffusion, GAN, and direct-decoding approaches.

Data Poisoning Attacks on Model Zoos – *Research Internship, Prof. Borth (AIML, HSG)* 2023
– Trained populations of vision models under multiple data-poisoning regimes and applied self-supervised hyper-representations to detect and classify partially poisoned model populations.

Generating Neural Network Model Zoos – *Bachelor's Thesis, Prof. Borth (AIML, HSG)* 2021
– Trained populations of vision models for model-property prediction using representation-learning.
– Co-authored resulting paper at **NeurIPS 2022**, contributing to dataset design and empirical analysis.

Professional Experience

Teaching Assistant – *Software Engineering Lab – Prof. Fritz (HASEL, UZH)* Feb – May 2025
– Mentored student teams through Agile development cycle of full-stack web applications and evaluated sprint execution, software quality, and interim / final reports and presentations.

Web Developer – *University of Zurich – Dept. of Computer Science* Aug 2024 – Present
– Developed, deployed and maintained financial data visualization tools (React, SQLite, Express).

Change Strategy & Initiatives Consultant – *Credit Suisse – Internship* Apr – Sep 2022
– Analyzed and supported strategic initiatives in fixed-income IB and the private-mortgage business.

Financial Services Consultant – *EY Zurich – Internship* Sep 2021 – Feb 2022
– Digital transformation consulting for global wealth management, insurance and reinsurance clients.

Technical Skills

Programming: Python, SQL, JavaScript; PyTorch, NumPy, pandas, scikit-learn.
Systems: Linux, Slurm, Docker, Git, multi-GPU training (DDP), W&B.
Coursework: Advanced Machine Learning, Deep Learning, Reinforcement Learning, Foundations of Data Science, Vision Algorithms for Mobile Robotics, Probabilistic AI.