

GRIGORII VEVIURKO



+491722161490



grivurko@gmail.com



LinkedIn



GitHub

Profile

PhD in Machine Learning with research experience in reinforcement learning, optimization, decision-making under uncertainty, and scientific machine learning. Currently developing learned models of complex physical systems at Apple, with a focus on surrogate modeling, symbolic regression, and automated ML workflows. Interested in robotics, embodied intelligence, world models, and learning-based control.

Experience

- Apple** **June 2025 – Present**
Machine Learning / Software Engineer, Analog Mixed-Signal Design *Munich, Germany*
 - Develop data-driven surrogate models for complex physical systems, replacing computationally expensive simulations with fast learned approximations.
 - Research interpretable and equation-based machine learning methods, including Kolmogorov–Arnold Networks and symbolic regression.
 - Build automated ML workflows for dataset preparation, model training, hyperparameter optimization, evaluation, and model selection.
 - Collaborate with domain experts to translate engineering requirements into robust machine learning models and validate them against high-fidelity simulations.
- Nokia Bell Labs** **Mar. 2024 – June 2024**
Research Intern *Stuttgart, Germany*
 - Developed a vision-language model for webpage element identification and integrated it into a prototype autonomous web-navigation agent.
 - Implemented and evaluated predict-and-optimize methods for a simulated home energy management system, analyzing their performance and failure modes.
- Delft University of Technology** **July 2020 – Nov. 2024**
PhD Researcher in Machine Learning *Delft, Netherlands*
 - Developed the Max-Reward reinforcement learning framework for goal-reaching problems through trajectory-level reward optimization; published at ICML 2024.
 - Developed methods addressing the zero-gradient problem in decision-focused learning with convex optimization.
 - Developed optimization methods for electric-vehicle charging under partial observability and validated the approach on a physical DC microgrid.
- Max Delbrück Center for Molecular Medicine** **Nov. 2017 – Jan. 2021**
Research Assistant *Berlin, Germany*
 - Developed deep-learning pipelines for automated detection and classification of naked mole-rat vocalizations, reducing manual annotation effort by approximately 80%.
 - Built Python tools for feature extraction and large-scale analysis of vocalization data.
 - Contributed machine-learning analyses demonstrating colony-specific vocal dialects, leading to a publication in *Science*.

Education

- Delft University of Technology** **2020 – 2025**
PhD in Computer Science *Delft, Netherlands*
 - Thesis: “Optimization under Uncertainty through Problem Reformulations”
- Bernstein Center for Computational Neuroscience** **2017 – 2019**
MSc in Computational Neuroscience and Machine Learning *Berlin, Germany*
 - Thesis: “Cooperative Multi-Agent Reinforcement Learning in Hanabi”
- National Research University Higher School of Economics** **2013 – 2017**
BSc in Mathematics *Moscow, Russia*
 - Thesis: “Zagier Series for Modular Height”

Selected Publications

- Veviurko G.**, Böhmer W., de Weerdt M., “To the Max: Reinventing Reward in Reinforcement Learning,” *ICML 2024* .
- Veviurko G.**, Böhmer W., de Weerdt M., “You Shall Pass: Dealing with the Zero-Gradient Problem in Predict and Optimize for Convex Optimization,” *arXiv:2307.16304* .
- Veviurko G.**, Böhmer W., de Weerdt M., “Surrogate DC Microgrid Models for Optimization of Charging Electric Vehicles under Partial Observability,” *Energies*, 2022 .
- Barker A. J., **Veviurko G.**, Bennett N. C., Hart D. W., Mograby L., Lewin G. R., “Cultural Transmission of Vocal Dialect in the Naked Mole-Rat,” *Science*, 2021 .

Skills

Research: Reinforcement Learning, Optimization, Symbolic Regression, Scientific Machine Learning, Surrogate Modeling, Vision-Language Models

Machine Learning: PyTorch, TensorFlow, Scikit-Learn, Transformers, Optuna, Weights & Biases

Scientific Computing: Python, NumPy, SciPy, Pandas

Engineering: Linux, Git, Docker, Bash, Slurm, Google Cloud Platform, L^AT_EX, VS Code AI-assisted development (Claude Code, LLM-based workflows)

Languages: Russian (native), English (fluent), German (B2), Dutch (A2)