Michał Bortkiewicz

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GitHub — LinkedIn — Google Scholar — Twitter

Education

06.2025 – 06.2026	**Princeton University**	
	Visiting Student Research Collaborator at RL Lab	
	Supervisor: Prof. Benjamin Eysenbach	
10.2021 - 06.2026	**Warsaw University of Technology**	
	PhD in Computer Science	
	Advisors: Prof. Tomasz Trzciński and Prof. Piotr Miłoś	
10.2015 - 02.2021	**Warsaw University of Technology**	
	M.S. with Distinction in Data Science	(GPA: 4.6/5.0)
	B.E. in Automation and Robotics	(GPA: 4.4/5.0)

Selected Publications

- Kevin Wang, Ishaan Javali, **Michał Bortkiewicz**, Tomasz Trzciński, Benjamin Eysenbach.
  1000 Layer Networks for Self-Supervised RL: Scaling Depth Can Enable New Goal-Reaching Capabilities.
  NeurIPS 2025 (**Oral**, **Best Paper Award**) https://wang-kevin3290.github.io/scaling-crl/
- Alicja Ziarko, **Michał Bortkiewicz**, Michał Zawalski, Benjamin Eysenbach, Piotr Miłoś.
  Contrastive Representations for Combinatorial Reasoning.
  NeurIPS 2025 https://princeton-rl.github.io/CRTR/
- **Michał Bortkiewicz**, Władek Pałucki, Vivek Myers, Tadeusz Dziarmaga, Tomasz Arczewski, Łukasz Kuciński, Benjamin Eysenbach.
  Accelerating Goal-Conditioned RL Algorithms and Research.
  ICLR 2025 (**Spotlight**) https://arxiv.org/abs/2408.11052
- Alex Lewandowski, **Michał Bortkiewicz**, Saurabh Kumar, András György, Dale Schuurmans, Mateusz Ostaszewski, Marlos C. Machado.
  Learning Continually by Spectral Regularization.
  ICLR 2025 https://arxiv.org/abs/2406.06811
- Michal Nauman*, **Michał Bortkiewicz***, Mateusz Ostaszewski, Piotr Miłoś, Tomasz Trzciński, Marek Cygan.
  Overestimation, Overfitting, and Plasticity in Actor-Critic: The Bitter Lesson of RL.
  ICML 2024 (*equal contributaion) https://arxiv.org/abs/2403.00514
- Maciej Wołczyk, Bartłomiej Cupiał, Mateusz Ostaszewski, **Michał Bortkiewicz**, Michał Zajac, Razvan Pascanu, Łukasz Kuciński, Piotr Miłoś.
  Fine-tuning Reinforcement Learning Models Is Secretly a Forgetting Mitigation Problem.
  ICML 2024 (**Spotlight**) https://arxiv.org/abs/2402.02868

Industry Experience

Creator Fund Venture Fellow Apr 2023 - Feb 2024
- Technical calls with founders of early-stage companies (pre-seed, seed) to assess the status of the deep learning stack, conduct due diligence, and source deals.

Samsung Research Deep Learning Research Engineer Nov 2021 - May 2022
- Researched novel on-device speech recognition methods using transformers, harmonic CNNs, and RNNs.

- Developed a containerised inspection tool for audio datasets exploration and model performance checks that was employed in the workflow of audio teams as a first step of the EDA.
- Introduced an efficient dataset management strategy using DVC and GIT for faster project iterations and inter-project data sharing.

Airspace Intelligence Machine Learning Engineer May 2021 - Oct 2021
- Delivered actionable insights based on air traffic data, leveraging statistical tools for online monitoring.
- Deployed Python microservice for taxi-time prediction, reducing Flyways AI platform MSE by 12% and enabling new scheduling features.
- Developed high-quality software using best practices: unit testing, containerisation, and code reviews.

Scope Fluidics Data Scientist Oct 2018 - May 2021
- Led the research and development of bacteria growth prediction methods based on ConvLSTM and Transformer architectures for accurate and fast detection. Reduced the binary classification error rate from 10% to 3% and made it possible to infer bacterial growth earlier for a wide array of antibiotics.
- Introduced MLOps practices in the organization using Azure ML, including experiment tracking, model versioning, and drift monitoring.

SpaceForest R&D Software Intern Jul 2018 - Aug 2018
- Developed extensions for 2D and 3D rocket simulators and PID controller for CARBONARA 2 rocket.

Projects

- **JaxGCRL** GitHub

Online Goal-Conditioned Reinforcement Learning benchamrk and codebase in JAX. Code for the publication *"Accelerating Goal-Conditioned RL Algorithms and Research".*

- **ScalingCRL** GitHub

Code for the publication *"1000 Layer Networks for Self-Supervised RL: Scaling Depth Can Enable New Goal-Reaching Capabilities",* with emphasis on scalable network architectures for RL.

Honors / Awards

Best Paper Award NeurIPS 2025:
1000 Layer Networks for Self-Supervised RL: Scaling Depth Can Enable New Goal-Reaching Capabilities
Contribution: Developed key components of the codebase, led manuscript writing, assisted in experiment ideation, and executed a portion of the experiments.

University Distinction:
Top 5% of Master's students for two consecutive semesters, Warsaw University of Technology.

Service

Reviewer
- ICLR 2025, 2026
- NeurIPS 2024
- CoLLAs 2025

Organizer / Presenter
- DSS 2022 – Chairman of the Computer Vision Track
- MLinPL 2024 – Main Track Presentation

Teaching
- Introduction to Artificial Intelligence (2023–2025 Warsaw University of Technology)
- Reinforcement Learning (2025 University of Warsaw)

Mentoring: I have supervised over five Master's students working on reinforcement learning and contrastive learning methods, including projects with industry applications for Scope Fluidics.

Skills

Research & Methods:	RL, Contrastive Learning, Continual Learning, Transformers, Plasticity Analysis
Programming & Tools	PyTorch, Jax, NumPy, Git, Slurm, Docker, Bash, uv, wandb, MuJoCo, Brax