Maciej Wołczyk

Email	maciej.wolczyk@gmail.com	Place of residence	Kraków, Poland
Webpage	maciejwolczyk.github.io	Google Scholar	Link

Education

2019 – Now **PhD, Jagiellonian University, Kraków**
Doctoral School of Exact and Natural Sciences,
Computer Science

2017 – 2019 **MSc, Jagiellonian University, Kraków (rector's scholarship)**
Faculty of Mathematics and Computer Science
Computer Science, specialization in machine learning

2014 – 2017 **BSc, Jagiellonian University, Kraków (rector's scholarship)**
Faculty of Physics, Astronomy and Computer Science
Computer Science

Research experience in the industry

III 2021 – X 2021 **Lyft/Woven Planet Level 5**
Internship in autonomous vehicles research team. Developing new solutions and implementing them in a real-world production setting.

VI 2017 – IX 2017 **Samsung R&D**
Internship in Natural Language Processing team

Research experience in academia

III 2022 - VI 2022 **Internship at ETH Zurich with prof. João Sacramento**
Investigating performance hypernetworks in meta reinforcement-learning and fast recall in continual learning

XI 2019 – Now **FNP grant, Bio-inspired artificial neural networks**
Stipendist, investigating intersections of neuroscience and ML

X 2018 – III 2020 **NCN grant, Efficient unsupervised learning with applications in deep learning**
Stipendist, investigating generative models

X 2018 – Now **Group of Machine Learning Research, Jagiellonian University**
PhD student, teacher assistant, server administrator

Science popularization

VII 2022 **Workshop on Dynamic Neural Networks, ICML 2022**
Member of Program Committee

VII 2022 **ML2Mind Summer School**
Co-organizer

VII 2020 **Eastern Europe Machine Learning Summer School**
Co-organizer

Selected publications

XII 2022	NeurIPS 2022 **Disentangling Transfer in Continual Reinforcement Learning** First co-author. We study transfer in continual reinforcement learning and provide recommendations, highlighting replay and exploration.
VII 2022	ICML 2022 **Continual Learning with Guarantees via Weight Interval Constraints** First co-author. We propose a continual learning approach based on interval arithmetics that provides guarantees on forgetting.
V 2022	ICRA 2022 **SafetyNet: Safe Planning for Real-World Self-Driving Vehicles Using Machine Learned Policies** Co-author. We combine machine learning policy for autonomous vehicles with rule-based safety constraints.
II 2022	AAAI 2022 **PluGeN: Multi-Label Conditional Generation From Pre-Trained Models** First co-author. We propose a method to adapt pre-trained generative models for conditional multi-label sample generation.
XII 2021	NeurIPS 2021 **Continual World: A Robotic Benchmark For Continual Reinforcement Learning** First co-author. We introduce a benchmark for continual reinforcement learning and perform an analysis of the problem.
XII 2021	NeurIPS 2021 **Zero Time Waste: Recycling Predictions in Early Exit Neural Networks** First co-author. We accelerate neural networks and reduce computation waste through efficient early exits.
X 2021	CoRL 2021 **Urban Driver: Learning to Drive from Real-world Demonstrations Using Policy Gradients** Co-author. We train imitation learning-based planning methods for autonomous vehicles and test them in the real world.
VIII 2020	IEEE Transactions on Neural Networks and Learning Systems **SeGMA: Semi-Supervised Gaussian Mixture Auto-Encoder** Co-author. We combine generative models and semi-supervised learning by modeling the latent space as a mixture of Gaussians.

Other

Technical skills	PyTorch, TensorFlow, Python, Bash, Linux, Git, Docker, Slurm
Reviewer at (* denotes highlighted reviewer)	ICML 2021*, NeurIPS 2021, ICLR 2022*, ICML 2022*, NeurIPS 2022