Maciej Wołczyk

Email maciej.wolczyk@gmail.com Place of Kraków, Poland

residence

Webpage <u>maciejwolczyk.github.io</u> Google Scholar <u>Link</u>

Education

2019 – 2023 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

2014 – 2017 BSc, Jagiellonian University, Kraków (rector's scholarship)

Faculty of Physics, Astronomy and Computer Science,

Computer Science

Research experience in the industry

2023 – Now Research Engineer, IDEAS NCBR, Warsaw

Sequential Decision Making team

III 2021 – X 2021 Lyft/Woven Planet Level 5

Internship in autonomous vehicles research team.

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 meta reinforcement-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 NeurlPS 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 NeurlPS 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 NeurlPS 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 ICML, ICLR, NeurIPS, IEEE TPAMI, Neural Networks, JMLR,

Collas, CoRL, TMLR

I agree to the processing of personal data provided in this document for realising the recruitment process pursuant to the Personal Data Protection Act of 10 May 2018 (Journal of Laws 2018, item 1000) and in agreement with Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation)