Contact

Web
kateh.ai

LinkedIn
haitsiukevich

Email
katsiaryna.haitsiukevich@gmail.com

Education

2025
DS in Technology
Aalto University

2018
MS in Applied Mathematics
Belarusian State University

2017
BS in Actuarial Mathematics
Belarusian State University

Frameworks

- Python
- PyTorch (and other ML libraries)
- Wandb (runs management)
- C#, .Net

Project Tools

- Git
- Jyputer notebook
- Confluence
- Jira
- Docker

Languages

English (fluent)

Swedish (intermediate)

Belarusian (native)

Katsiaryna Haitsiukevich
Postdoctoral Researcher

I am a Postdoctoral Researcher at University of Helsinki developing deep learning models for applications in science. I make the models more sample-efficient and suitable for practical applications. Throughout my research, I contributed to the development of neural network architectures with incorporation of prior knowledge and applying latest advances such as Diffusion models and LLMs within several academic research projects and in collaboration with industry. My prior experience equipped me with strong skills in multi-disciplinary collaborations and team work. I am highly motivated, eager to learn new concepts and to advance my expertise in deep learning models for real world applications.

Experience

Dec 2024 - present
University of Helsinki, Department of Science | Helsinki, Finland
Postdoctoral researcher

Working on deep learning models for applications in science in collaboration with Center of Excellence Virtual Laboratory for Molecular Level Atmospheric Transformations (VILMA).

Dec 2019 - Dec 2024
Aalto University, School of Science and Technology | Espoo, Finland
Doctoral researcher

Thesis: Advances in physics-informed deep learning, supervised by Prof. Pekka Marttinen and advised by Dr. Alexander Ilin. I worked on several projects including Physics-informed neural networks and applications of Deep Learning in science and engineering.

Feb 2019 - Nov 2019
EPAM Systems | Minsk, Belarus
Data Scientist

An NLP project, created a model training and evaluation pipeline, performed experiments with various machine learning techniques, prepared and presented reports for business users.

Oct 2015 - Feb 2019
CompatibL | Minsk, Belarus
Quantitative Software Engineer

I contributed to development of CompatibL risk platform and collateral optimization engine. I also participated in research on credit risk modelling methodology.

Publications

Haitsiukevich K., Poyraz O., Marttinen P., Ilin A. *Diffusion models as probabilistic neural operators for recovering unobserved states of dynamical systems*, MLSP, 2024

Merler M.*, Haitsiukevich K.*, Dainese N.*, Marttinen P., *In-Context Symbolic Regression: Leveraging Large Language Models for Function Discovery*, ACL Student Workshop, 2024

Haitsiukevich K., Ilin A. *Improved Training of Physics-Informed Neural Networks with Model Ensembles*, IJCNN, 2023

Haitsiukevich K., Ilin A. *Learning Trajectories of Hamiltonian Systems with Neural Nets*, ICANN, 2022

Haitsiukevich K., Bergman S., de Araujo Filho C., Corona F., Ilin A. *A Grid-Structured Model of Tubular Reactors*, INDIN, 2021

Teaching and Supervision

Advisor for Master's thesis "*Transformer? Improving training of Physics-Informed Neural Nets*" (2024)

Advisor for Bachelor's theses (2024):
- "*Physics-informed neural networks: accuracy and convergence*"
- "*Latest Breakthrough in Diffusion Model and its Applications*"

Co-supervisor of research projects conducted by Master-level students (2020 - 2024)

Teaching Assistant at Deep Learning (2020, 2024) and Seminar on Deep Learning (2021, 2022)

Reference

References Available Upon Request