

Inal Adam Mashukov

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[LinkedIn](#) | [Google Scholar](#) | [Github](#) | [ResearchGate](#) | [My Website](#)

Education

University of Massachusetts - Boston

- Mathematics, BA 2019 - 2023
Recipient of the EKM Scholarship at UMass Boston
 - Computer Science, PhD, GPA 3.7 2024
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Publications

- *A Multi-view Feature Construction and Multi-Encoder-Decoder Transformer Architecture for Time Series Classification.* Li, Z., Ding, W., Mashukov, I., et al. (2024). Advances in Knowledge Discovery and Data Mining. PAKDD 2024. Association for Computing Machinery Digital Library. Springer.
 - *Autonomous Human Movement Analyzer System.* Mashukov, I., Chen, P., Ding, W., In Proc. IEEE Int. Conf. on Machine Learning and Autonomous Systems (ICMLAS), (2026). (Accepted)
 - *Optimizing Real-World Physical Activity Recognition: Determining Data Sufficiency and Exploring Model Robustness.* Mashukov, I., Ding, W., et al (2025). Artificial Intelligence in Medicine. (Under review).
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Experience

• Researcher

2023 - Present

Artificial Intelligence Laboratory,
Knowledge Discovery and Data Mining Laboratory
Department of Computer Science
University of Massachusetts Boston
Supervisors: Dr. Wei Ding, Dr. Ping Chen

Performing academic research and developing novel state-of-the-art Deep Learning models. Building models in Python using Pytorch, Tensorflow, and the associated frameworks. Adhering to production level software development practices. Training deep learning models and assessing their performance, tuning the models to produce better results.

• Applied Researcher

2024 - Present

Massachusetts General Hospital, Harvard Medical School
Supervisors: Dr. Shiqian Shen (Harvard Medical School, MGH)

Building deep learning models for video recognition, time series analysis. Performing model training and tuning, particularly in the context of video and sensor data recognition for human and animal activities for medical applications at MGH, Harvard Medical School.

• Statistician, Graduate Assistant

2024 - Present

Performing statistical analysis for graduate researchers; analyses include regression and problems involving parametric statistics. Lecturing graduate students on mathematical statistics and statistical software, such as R, Python, SPSS, others.

Skills

- **Programming languages and development tools:** Python (including PyTorch, HuggingFace, TensorFlow, XGBoost, others), Java, SQL (Oracle and Microsoft), R, C, C++, Linux, Docker, Git, CI/CD, AWS.
 - **Deep Learning AI models and algorithms:** Transformers, Convolutional Neural Networks, Recurrent Neural Networks, Generative Adversarial Networks (GANs), Autoencoders, Diffusion Models, Reinforcement Learning, Deep Q-learning, Large Language Models (LLMs), Representation Learning (Masking, Pretraining, Contrastive Learning).
 - **Artificial Intelligence applications:** Time Series Analysis, Computer Vision, Audio Processing, Natural Language Processing, Classification, Regression, Clustering, Representation Learning, Generative and other tasks.
 - **Performing deep learning model training and hyperparameter tuning** using Nvidia's CUDA for GPU utilization, distributed learning (DDL), implementing various methods of model selection and performance assessment, using pretrained models, etc.
 - **General:** Computer Security and Networking, Cryptography, Database Administration and Design, Classical Machine Learning models and algorithms, Object-Oriented Software Design and Development, Mathematics and Theoretical Computer Science.
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Professional Service

- **Editor, Reviewer** 2024 - Present
Association for Computing Machinery, Transactions on Knowledge Discovery from Data,
Association for Computing Machinery, Transactions on Intelligent Systems and Technology
Serving as a reviewer of research publications submitted to the Association for Computing Machinery's Journals.
- **Administrator** 2025
With Dr. Wei Ding
Society for Industrial and Applied Mathematics, International Conference on Data Mining SDM
- **Teaching Assistant** 2023 - 2024
Department of Engineering
University of Massachusetts Boston
Performing data collection for students in experiments that use motion capture technology. Teaching machine learning principles and building deep learning models in Python, including theory and coding.