Nikita Severin

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Data scientist with a total of 3 years of work on ML projects and 1 year of job experience including deployment of ML-models to production. I have a focus on Graph ML and NLP.

Work experience

Research Intern at JetBrains Research   *July 2021 – March 2022*

JetBrains is one of the leading international companies building tools for software developers and teams

I was responsible for development of an inductive graph ML model for predicting polypharmacy side-effects

- o Adapted several existing inductive models and boosted their performance on the polypharmacy dataset
- o Developed a new inductive model outperforming selected ones in terms of speed and quality

Junior ML Engineer at Art-Int Labs   *August 2020 – November 2020*

Art-Int Labs is a startup focused on implementation of AI-technologies into business

I was responsible for development of a system for processing and analyzing human speech

- o Developed baseline model for human emotions classification based on both speech and text
- o Integrated the developed model, speaker diarization and speech recognition systems into production pipeline

Side projects and relevant experience

Research Project for a Major European Bank   *May 2021 – August 2021*

The project was devoted to development of the graph ML model solving pre-existing problem posited by the bank

- o Compiled a literature review on existing models
- o Implemented several existing models into our evaluation framework for comparison and performed experiments

Other projects   *2019 – present*

The Global AI Challenge (team: 3rd/43) · Extractive Summarization for Russian-Language Texts (B.Sc. thesis)
Chekhov Digital (partially marked up the texts, built the search engine and site backend)
Machine Learning on Temporal Graphs (M.Sc. thesis, in progress)

Education

Moscow Institute of Physics and Technology   M.Sc. in Discrete Mathematics and Data Science
Moscow, Russia   *2020 – present*

Tinkoff Backend Academy   Backend Development
Moscow, Russia   *2021 – present*

Southern Federal University   B.Sc. in Computer Science
Rostov-on-Don   *2016 – 2020*

Skills & Tools

Programming languages: Python • C++ • C# • Kotlin • SQL

Mathematics & algorithms: statistics • game theory • graph algorithms • network science

ML/DL & EDA: PyTorch • LightGBM / CatBoost • Scikit-learn • Pandas, NumPy • Matplotlib • Plotly

NLP: Transformers • NLTK • SpaCy • Gensim • TopicNet (basic level) • Natasha

Graph ML: GNNs for homogenous, knowledge, temporal graphs • DGL • PyTorch-Geometric + Temporal

Big data & DevOps tools: Apache Hadoop • Hive • Spark (basic level) • Docker + Compose • Vagrant

Web-development: Python + Django • SQLite / PostgreSQL • HTML / CSS

Languages

Russian – Native proficiency · **English** – Full professional proficiency

Publications

Makarov, I., Savchenko, A., Korovko, A., Sherstyuk, L., Severin, N., Kiselev, D., Mikheev A., Babaev, D. "Temporal network embedding framework with causal anonymous walks representations". PeerJ Computer Science 8 (2022): e858.