Providing AI solutions for over 7 years. Broadly interested in ML, esp. efficient and reliable DL for NLP. Working on graph optimization and analysis for warehouses. Experienced in full-stack research & development of conversational AI experiences and ML for comp. chemistry.

Recent Experience

Software Engineer May 2025 – Present
EPAM Systems Tashkent, Uzbekistan

- o R&Ding graph optimization algorithms (path coverage, nearest-neighbor search, etc.) for SLAM.
- o Building structured data processing and inferential analysis pipelines on demand.
- o Enhancing API integrations with scalability, faster inference, and resource efficiency.

Data Scientist / Machine Learning Engineer

Alif Tech (Alif IT, Alif Uzbekistan)

Aug 2022 - Apr 2025

Tashkent, Uzbekistan

- o Designed and developed closed domain task-oriented AI assistants for the automation of customer experiences. Responsibilities included data curation, modeling & evaluation, operationalization, and maintenance. Some of the specific concepts involved were parameter-efficient fine-tuning, contrastive learning, named-entity recognition, and resource-efficient & scalable deployment of deep learning pipelines. Principal results: 68-72% of containment rate w/ $\gtrapprox 97\%$ coverage of chats through all contact channels in ≤ 2 seconds of response time and estimated $\lessapprox 90\%$ of end-to-end precision, incl. 48-65% of task success $\textcircled{\textcircled{3}}$. Whew!
- o Contributed to the advancement of credit scoring, document OCR, transaction fraud detection, and employee engagement services.

Research Engineer Sep 2018 – Aug 2022

Romanovsky Institute of Mathematics, Academy of Sciences of Uzbekistan

Tashkent, Uzbekistan

- Trained multi-task autoregressive language models on large clusters. Achieved state-of-the-art performances in open-ended generative molecular tasks as well as downstream supervised tasks. Published technical reports.
- o Designed and built AI environments for low-data high-dimensional supervised learning and graph deep learning.
- o Collaborated with local and international research labs on molecular-property prediction and survival analysis. Spoke at seminars.

Developer InternJun 2017 – Aug 2018Misc.Tashkent, Uzbekistan

Completed multiple internships focused on payment systems and computer networks. Developed Bash, JavaScript, and Python scripts to add functionality, optimize code, and automate routine tasks, enhancing operational efficiency.

Skills

- o **Programming Languages**: Python &, Bash, SQL, LATEX, C, C++, R.
- o Tools: [DS] PyTorch 4, @ Transformers & co., XGBoost 4, Scikit-Learn, Pandas, NetworkX, etc.; [MLE] DVC, Sanic, Docker, K8S, etc.
- o Concepts & Practices: Deep Learning, Statistics, Graph Algorithms, Optimization, Scientific Research, CI/CD, Scrum, OSSD, MLOps.

Education

BSc in Applied Mathematics and Computer Science

Lomonosov Moscow State University in Tashkent

Sep 2014 - Jun 2018

Tashkent, Uzbekistan

- \circ Main coursework includes pure & applied math, intelligent systems, and scientific computing in C/C++.
- o Research and thesis on graph theory (coloring and planarity testing).
- $\,\circ\,$ Volunteer instructor at Math and Programming Club for prospective students.
- o ACM-ICPC NEERC contestant.

Publications

Adilov, Sanjar (2021): Generative Pre-Training from Molecules. ChemRxiv. Preprint.

https://doi.org/10.33774/chemrxiv-2021-5fwjd

S.Sh. Adilov. An upper bound for the chromatic number of graphs with given thickness and girth. In *Intelligent systems. Theory and applications*, volume 22, issue 3, 2018.

And more in my Google Scholar: https://scholar.google.com/citations?user=NzU11nAAAAAJ

Misc.

- o Community Service: Mentoring in hackathons (one MVP took the first place and has eventually become an integral part of the credit scoring ecosystem of Alif Uzbekistan (2024); another project secured the 2nd place (2025)); public presentations on DL life cycle, foundational models, tabular learning, etc.
- o Languages: Uzbek (native), Russian (full proficiency), English (C1; TOEFL 108/120, 2024).
- Side Projects: scikit-fallback: machine learning w/ rejections (more on Medium and Github).
- o Hobbies: Guitars, US & Soviet history, classic rock music, fiction books, old movies, swimming.