Sanjar Adilov | Data Sci / ML Eng

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sanjaradylov

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

Recent Experience

Software Engineer — **May 2025 – Present**
EPAM Systems — *Tashkent, Uzbekistan*

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

Data Scientist / Machine Learning Engineer — **Aug 2022 – Apr 2025**
Alif Tech (Alif IT, Alif Uzbekistan) — *Tashkent, Uzbekistan*

- 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* 😀. Whew!
- 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.
- Designed and built AI environments for low-data high-dimensional supervised learning and graph deep learning.
- Collaborated with local and international research labs on molecular-property prediction and survival analysis. Spoke at seminars.

Developer Intern — **Jun 2017 – Aug 2018**
Misc. — *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

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

Education

BSc in Applied Mathematics and Computer Science — **Sep 2014 – Jun 2018**
Lomonosov Moscow State University in Tashkent — *Tashkent, Uzbekistan*

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

- **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.
- **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).
- **Hobbies**: Guitars, US & Soviet history, classic rock music, fiction books, old movies, swimming.