

AIRAT | VALIULLIN



Education

[Oct 2022 — Jul 2025] **Technical University of Munich**
M.Sc. in Informatics

- Thesis: trained neural solvers for chaotic PDEs

[Sep 2018 — Jun 2022] **Moscow Institute of Physics and Technology**
B.Sc. in Applied Mathematics and Physics

- Thesis: solved PDEs using integral transformations

Tech Stack

- Python (numpy, scikit-learn, pytorch, pandas, pyspark, matplotlib, plotly, fastapi, openai/langchain)
- SQLite, PostgreSQL, GraphQL
- Git, GitHub (actions, workflows, PR)
- VSCode, C++, \LaTeX , Linux
- Apache Spark / Airflow
- Rust, SolidWorks, Matlab, MS Office, and more

Skills

- Mathematics, Analysis and Statistics
- Data Visualization, Processing and Analysis (ETL/ELT)
- Algorithms and Data Structures
- Machine Learning, Statistics, Data Science
- Technical and Academic Writing

Events

- IAC2022, Paris, Sep 2022
- HackaTUM22/23/24, Munich, Novembers 2022/23/24
- Ferienakademie 2023, Sarntal, Sep 2023
- PyCon Sweden 2024, Stockholm, Nov 2024
- PyData Global 2024, virtual, Dec 2024
- START Hack, Munich, Dec 2024 (*winner*)
- START Hack, St. Gallen, Mar 2025 (*winner*)

Human Languages

- English (C1/C2)
- German (B2+)
- Russian (native)
- Tatar (native)

Summary

I am an expert Python developer and mathematician with experience in data engineering and analysis, numerical optimization, and machine learning. Currently pursuing a M.Sc. in Computational Science and Engineering at TUM, I am nearing completion of my studies and looking for full-time opportunities starting mid-2025.

- I am a** python developer, data scientist, mathematician, researcher, teacher
- I love** playing music, reading, coding, cycling, hiking, photography, cinema

Experience

[Jan 2024 - present] **ASMPT Germany**
Working Student

- Developed and deployed dashboards for tracking unit test coverage, build reports, developer activity and other critical information
- Analyzed extensive multiterrabyte bug report data and built a database for faster access and processing; established a ETL pipeline
- Conducted numerical analysis, improving the placement process, and handling test set generation
- Performed learning on component images for error type classification

[Feb 2023 - Oct 2023] **TUM Robotics Lab**
Working Student, Research Assistant

- Worked on a motion planning framework (Movelt) to ensure safe human-robot interaction
- Assisted with motion capturing live data; analysed and visualized the sensor data

[Apr 2024 - May 2024] **freelance**
Software Developer

- Developed a telegram bot for a local business
- Managed a Git repository, set up database ORM, logging, connected to google sheets API and telegram API, etc.

[Mar 2021 - Oct 2023] **Russian Academy of Sciences**
Research Assistant

- Coauthored research papers on the nonlinear vibrations of overhead power lines
- Conducted numerical experiments and validated the results

[Oct 2019 - Oct 2022] **self-employed**
Mathematics Tutor

- Tutored up to 10 students per week in private sessions using own detailed lesson plans
- Taught university and olympiade level mathematics