MIKITA SAZANOVICH

Personal Website GitHub profile

SUMMARY

I have diverse experience in Machine Learning, Software Engineering, and Competitive Programming through multiple internships and competitions.

EDUCATION

Saint Petersburg, Russia

Higher School of Economics

Sep 2019-present (until Jun 2021)

- Studying towards a Master's degree in Computer Science.
- GPA: 9.9 out of 10.
- Coursework: Web Search, Machine Learning on Big Data, Software Project Management.

Saint Petersburg, Russia

Higher School of Economics

Sep 2015-Jun 2019

(4 years)

- Graduated with distinction with a Bachelor's degree in Computer Science.
- GPA: 9.9 out of 10.
- Coursework: Image Analysis, Machine Learning I & II, Deep Learning, Natural Language Processing, Speech Recognition and Generation, Reinforcement Learning, Databases, Building Database, Software Design, Parallel Programming, Functional Programming.

PROFESSIONAL EXPERIENCE

Saint Petersburg, Russia

Research Engineer **JetBrains**

May 2020-present (4 months)

- Team: JetBrains Research.
- Managing and developing the company's codebase for the bi-yearly self-driving competition, Al Driving Olympics.
- Mentoring two summer interns who are a part of the other machine learning competitions, such as black-box optimization challenge.
- Tech: Python, PyTorch, AWS.

Zürich, Switzerland

Research Intern Google

Dec 2019-Apr 2020 (4 months)

- Teams: TensorFlow, Brain Research.
- Worked on machine-learning research, where I explored novel directions towards increasing model capacity and implemented them in a large-scale machine learning language model. The final trained model had several billion parameters.
- Tech: Python, TensorFlow, TPUs.

Toronto, Canada

Research Intern Uber

Jul 2019-Sep 2019 (3 months)

- Team: Uber ATG.
- Worked on self-driving research with the ATG's R&D department, where I developed and trained distributed machine learning models using both real-world and simulated data.
- Tech: Python, PyTorch, GPUs, Horovod, Docker.

Los Angeles, United States Software Engineering Intern Google

Jun 2018-Sep 2018 (3 months)

- Team: Google Drive.
- Worked on developing debugging tools for Drive. I was conducting interviews with engineers regarding needed features, accordingly updating backend APIs, incorporating them into the debugging service, and integrating with the frontend.
- Tech: Java, gRPC, RxJava-like framework, Microservices platform, Database services.

Zürich, Switzerland

Software Engineering Intern Google

Jul 2017-Sep 2017 (3 months)

- Team: Google Calendar.
- Worked on improvements and experimental features for the Calendar's meeting scheduling services for enterprise users. The project involved product discussions and algorithm design.
- Tech: Java, Guice, Protocol Buffers, Dagger Producers-like framework.

Open Source Projects

- <u>RL from Demonstrations in Dota 2</u> (2018-2019) trained a DQN agent in the Dota 2 environment. The work included collection of video demonstrations from human experts and wrapping and maintaining the wrapper for the game client to serve as a learning environment.
- Reinforcement Learning Algorithms (2019) provided implementations of classic RL algorithms.
- Context Helper (2017-2018) developed and <u>published</u> a plugin for IntelliJ IDEA, which helps Java developers to find StackOverflow discussions that are relevant to their source code context in IDE. I optimized the experience by creating a corpus of data from StackOverflow and measuring the success of different methods on it.
- <u>Blackout</u> (2016) developed a game for Android with libGDX. I worked on integration with Google Play Game Services, the infrastructure of game servers, and a client-server connection for real-time multiplayer.
- <u>Contribution to GHC</u> (2016)— resolved and committed a Glasgow Haskell Compiler request that asked for greater customization of GHCi (GHC repl) prompt. The result is available in GHC, starting from version 8.2.1.

Competitive Programming

- The 27th International Olympiad in Informatics, top 10%, silver medal, 2015.
- The 28th Belarusian National Olympiad in Informatics, absolute winner, 2015.
- The 27th Belarusian National Olympiad in Informatics, absolute winner, 2014.
- The 26th Belarusian National Olympiad in Informatics, gold medal, 2013.

PUBLICATIONS

• Imitation Learning Approach for Al Driving Olympics Trained on Real-world and Simulation Data Simultaneously.

Mikita Sazanovich, Konstantin Chaika, Kirill Krinkin, Aleksei Shpilman.

Workshop on AI for Autonomous Driving (AIAD), ICML 2020.

LiDARsim: Realistic LiDAR Simulation by Leveraging the Real World.
Sivabalan Manivasagam, Shenlong Wang, Kelvin Wong, Wenyuan Zeng, Mikita Sazanovich, Shuhan Tan, Bin Yang, Wei-Chiu Ma, Raquel Urtasun.
CVPR 2020.

TECHNOLOGIES

- Languages: Python, JVM family (Java, Kotlin, Scala), C++, Haskell.
- Frameworks: TensorFlow, PyTorch.
- Libraries: NumPy, SciPy, Pandas, Scikit-learn, OpenCV, Mathplotlib.
- Tools: PyCharm/IntelliJ IDEA, Jupyter Notebook, TensorBoard, Anaconda, virtualenv, Docker, Unix.
- Platforms: AWS.