

NIKITA SAFRONOV

(646) 920-0657 | safronikita@gmail.com | nsafronov.com | Brooklyn, New York

EDUCATION

Binghamton University, State University of New York

Master of Science in Mathematics and Statistics

Bachelor of Science in Mathematics and Statistics

Binghamton, NY

Expected December 2026

Expected December 2025

- Dean's List: Fall 2023-Spring 2025 | **GPA: 3.91/4.00**

Relevant Coursework: Time Series, Advanced Statistical Learning, Statistical Modeling, Practical Data Analysis, Probability, Statistical Inference, Computational Linear Algebra, Scientific Computing, Real Analysis, Complex Analysis, Differential Geometry

TECHNICAL SKILLS

Programming: Python (PCEP Certified; Pandas, Scikit-learn, PyTorch, Matplotlib, Seaborn), R, SQL, MATLAB

Tools: Git, Jupyter, Docker, Microsoft Office Suite, Google Workspace

Problem Solving: Putnam (Scores: 18 in 2023, 16 in 2024), 800+ Leetcode Problems Solved, 800+ Quantable Problems Solved

Languages: English (Native), Russian (Native)

PROFESSIONAL EXPERIENCE

Binghamton University

Undergraduate Researcher

May 2025 - Present

Binghamton, NY

- Simulate **200k** 3D faces by injecting controlled signal patterns into the top 5 principal components of real facial geometry (**R+scikit-learn**) to create a benchmark for downstream feature significance analysis
- Optimize **PyTorch** curvature autoencoder via exhaustive 7-hyperparameter grid search (**>1,500 models**) with 3-fold CV
- Compress high-resolution facial matrices (**7,000** values/face) into **20** latent dimensions, cutting memory and compute by **300x**
- Cut false discovery rate by **50%** with novel Curvature+Autoencoder pipeline; benchmarked against XYZ+PCA and Curvature+PCA via **CCA+FDR_q** to rank reproducible geometric drivers

Outlier.ai (Scale AI subsidiary)

Mathematical Model Analyst and Optimization Specialist

July 2024 - August 2025

New York, NY (Remote)

- Enhanced **OpenAI's LLM** accuracy by **30%** through Reinforced Learning from Human Feedback (RLHF) methodology
- Executed over **3000** Mathematics and Statistics tasks essential for creating high-quality training data for ChatGPT
- Promoted to Senior Reviewer of tasks on **8** different projects due to an exceptional **4.7/5.0** average task rating

DataAnnotation.tech

Data Annotator

May 2024 - July 2024

New York, NY (Remote)

- Trained AI models to manipulate and visualize structured datasets by creating tasks requiring **Pandas, NumPy, and Matplotlib**, ensuring accurate data cleaning and efficient data handling
- Evaluated and corrected AI-generated code and visualizations on **50+** dataset tasks weekly to improve model accuracy

PROJECT EXPERIENCE

Discord User Enhancement with Fairfield University | <https://discorduserenhancement.netlify.app>

June 2022 - May 2023

Code Assistant, Bot, and Website Developer

New York, NY (Remote)

- Developed a **full-stack** Python application to improve the experience of controlling and censoring hate speech on Discord servers
- Utilized **Discord API** with the **Repl.it** platform and the **Uptime Robot** website monitoring service to deploy the designed bot to Discord servers successfully, resulting in a **70%** increase in hate speech censorship and over **100** downloads
- Collected user interaction data in confidential CSV files and identified the most censored hate speech to target in the future

LEADERSHIP EXPERIENCE

Binghamton University Poker Club

March 2024 - Present

Secretary

Binghamton, NY

- Utilize **Google Sheets** to keep track of participants' point distribution given from each game in order to manage player rankings
- Assist in the planning and execution of weekly on-campus and in-state club poker tournaments and social events, ensuring a smooth and enjoyable experience for over **150+** interested members

Emerging Leaders Program (ELP)

August 2023 - December 2023

Participant

Binghamton, NY

- Worked together with fellow ELP members in weekly discussions to develop a community service project that helped improve various aspects of the Binghamton community, such as volunteering in dog shelters and canvassing for the exposure of restaurants
- Contacted and collaborated with various organizations for insight and cooperation in fulfilling the duties of the various projects