Daniil (Daniel) Turpitka

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EDUCATION

University of California, Irvine - Donald Bren School of Information and Computer Science

• **Degree:** Bachelor of Science in Data Science - GPA: 3.6

Expected June 2023

• Achievements: Deans Honor List: 6 quarters

RELEVANT SKILS

Python, **SQL**, MYSQL, Postgres, **C++**, **C#**, **Java**, Assembly, Object Oriented Framework Design, **Deep Learning**, **Tensorflow**, Scikit-learn, Pandas, Numpy, **R**, **Git**, **Machine Learning**, Statistical Data Analysis, Data Visualization, Bayesian Statistics, **Algorithm Design**, PromQL, Grafana, Prometheus, Computer Architecture, Statistics and Probability.

WORK EXPERIENCE

Undergraduate Research Assistant

March 2022 - Present

University of California, Irvine - Informatics Department - Irvine CA

- Developed 4 convolutional neural networks and 2 classifiers for processing images obtained from telescopes to conduct preliminary binary classification of astronomical objects based on anomaly detection capabilities of neural network trained on heavily imbalanced datasets.
- Conducted statistical analysis on neural network results to determine its effectiveness and appropriateness for the research project purposes.
- Resolved problem of research project datasets containing too much bad data and optimized potential target search.

Software Engineering Intern

June 2022 – September 2022

Apple - Cupertino, CA

- Developed 3 versions of highly scalable Python framework to optimize usage of external APIs such as Prometheus, Docker, and Grafana in company's internal Machine Learning platform. Enhanced and extended systems real time model performance monitoring capabilities.
- Using developed framework, engineered 6 customizable Grafana dashboards for engineers to monitor vitals, usage volume, and performance of 2 critical internal services.
- Took full ownership of the project. Reported to direct and skip managers. Closely collaborated with engineers and project managers of company's critical infrastructure during development, testing, and deployment phases of the project.

Lab Tutor September 2022 – Present

UC Irvine, Department of Informatics - Irvine, CA

- Helped 20+ students get familiar with Python and C++ syntax and concepts by assisting them with challenging parts of the course and helping them debug their C++ code.
- In collaboration with other tutors created a C++ debugging tutorial with 15 debugging tips for students in this class to use while completing their assignments.
- Reported to the course instructor on how well students perceive material, most common difficulties, measures to be taken to better prepare student for the next course in the sequence.

PROJECTS

Python: 2 player tic-tac-toe game, custom named tuple class, game with moving and interacting objects, convolutional neural networks, autoencoders, Sudoku AI.

C++: Othello game AI, Customizable String class, grammar checker with hash set and AVL set, Custom containers.

MIPS Assembly: Chess game, weighted job scheduler, miscellaneous.