

EDUCATION

Carnegie Mellon University

May 2024

Bachelor of Science in Computer Science

Concentration in Machine Learning, Minor in Russian Studies

- GPA: 3.6/4.0.
- Coursework: Algorithm Design and Analysis, Intermediate Deep Learning, Intro to Machine Learning, Modern Regression, Parallel and Sequential Data Structures and Algorithms, Theoretical Computer Science, Artificial Intelligence, Functional Programming, Computer Systems, Probability Theory.
- Activities: Dancers' Symposium, Sustainable Earth, Women@SCS/SCS4ALL
- Honors: SCS Deans List with High Honors (2022), KVPY Fellow (2019), UPitt Olympiada of Spoken Russian Gold Medalist (2023)

SKILLS

Languages	Python, R, C, HTML/CSS, OCaml, Dart, SML/NJ, Julia, Bash, Unix, JavaScript
Tools	Git, Docker, ROS, Gazebo, \LaTeX , Flask, Flutter, AWS, Node.js, REACT
Libraries	Keras, Pandas, TensorFlow, PyTorch

TECHNICAL EXPERIENCE

Research Assistant

Sep 2022 — Present

CMU Machine Learning Department

Pittsburgh, PA

- Conducting research with [Dr. Nihar Shah](#) to improve scientific peer review.
- Developing novel algorithms and proving theoretical bounds to improve online reviewer assignment algorithms in journals.

INSIGHT Program (SWE track)

Aug 2022 — Aug 2022

Jane Street

New York City, NY

- Executed trading strategies to construct a bot to compete in Jane Street's Electronic Trading Competition (placed 3rd/40+ interns).

Software Engineering Intern

May 2022 — Aug 2022

Counselab/CoffeeSpace

San Francisco, CA

- Counselab is a San Francisco based social networking start-up dedicated to 1:1 advice sharing.
- Developed and implemented growth metrics and integrated Mixpanel Analytics into the Flutter codebase to track client and server-side activity.
- Implemented front-end features (explore and caching), ideated and built a Deep Learning based recommendation system.

Teaching Assistant

Jan 2022 — May 2022

CMU Computer Science Department

Pittsburgh, PA

- Led 1-on-1 tutoring sessions with CS students for Discrete Math (Spring '22).
- Collaborated with advisors in weekly meetings to introduce changes to the undergraduate curriculum to support students.

Research Assistant

Feb 2021 — July 2021

CMU Reliable Autonomous Systems Lab

Pittsburgh, PA

- [Multi-Modal Communication for Teachable Robots](#) with Dr. Reid Simmons.
- Deployed a user-study using [Flask](#) and [HTML/CSS](#) to understand learning through a teacher robot.
- Created 20+ robot-behaviour simulation videos through [Python](#), [ROS](#) and [Gazebo](#).

PROJECTS

Sustainable Earth Autonomous Garden

Python, TensorFlow, OpenCV

- Led the software group in building an autonomous garden with a 2-D robotic gantry as part of CMU's Sustainable Earth club.
- Implemented a CNN-based object detection pipeline to automate agricultural processes.
- Taught students basics of machine learning and software engineering.

PushkinAI

Python, TensorFlow

- Built a poem generator using a Russian version of GPT, a custom tokenizer, and word embeddings that generate coherent, aesthetic, and original Russian poetry when given some seed text.
- Analyzed results on a variety of metrics as well as manual expert empirical evaluations.

C0 Compiler

OCaml, Docker

- Built a compiler in OCaml for C0, a subset of the C programming language developed at CMU.
- Developed a lexer and parser and implemented SSA-based register allocation.