# Mykhaylo Nelyubov

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# EDUCATION

## University at Buffalo

Buffalo, NY

Expected May 2024

May 2023

Minor - Mathematics

# Work Experience

Capital One New York, NY

Software Engineering Intern

Summer 2022, Summer 2023

- Automated error reporting and corrections on file submissions to save agents and engineers time on manual error reviews by creating a Python Slackbot using AWS Lambda and SNS
- Designed a modular framework for the bot to streamline onboarding more services across the organization
- Enhanced pre-production error detection capabilities by deploying a User Acceptance Testing (UAT) environment for clients and product teams to verify integrity of deliverables

# School of Engineering and Applied Sciences IT

Master of Science - Robotics Engineering - 4.0 GPA

Bachelor of Science - Computer Engineering - 3.971 GPA

University at Buffalo

Student Assistant

Jul 2019 - Present

- Automated monitoring of new update releases for 120 software packages by creating a collection of web scrapers and Microsoft Teams integration to notify administrators of updates
- Streamlined system configuration, updates, and diagnostics by automating 60 routine tasks with PowerShell to mitigate network security risks, update systems, and diagnose common sources of issues
- Designed and developed a robust web server, integrated with a SQL database, to securely store encryption recovery keys, resolving multiple challenges inherited from the previous system.
- Increased team efficiency through custom spreadsheets that allow for better workflow tracking on patch deployment and user communication
- Trained department staff on use of newly developed scripts and version control infrastructure for process automation to ensure that operations continue to run smoothly and efficiently

#### Projects

## Climate Control Failure Watchdog

Aug 2023

• Implemented an alert system to notify users in real-time when temperatures exceeded safe thresholds, empowering users to take immediate corrective actions in the event of cooling system failures

#### UB Hacking 2022 - Urgent Care Volunteer Scheduler

Nov 2022

- Automated scheduling of 100 monthly urgent care facility volunteer appointments to reduce manual workload on facility coordinators
- Utilized Google Forms and the Google Sheets API to ingest availability schedules of volunteers
- Tailored scheduling algorithm to prioritize filling high demand time slots for each urgent care facility
- Published finalized schedules for access by volunteers at each facility using the Python Google Calendar API

### Convolutional Neural Network Optimization

Nov 2022 – Jan 2023

• Optimized hyperparameters of models through a heuristic search of a discretized hyperparameter space, achieving 93.9% accuracy on the Fashion MNIST Dataset, 99% accuracy on a UB SonicASL dataset

2048 Apr 2022

- Implemented the game 2048 in ARM Assembly on a Tiva C microcontroller
- Interfaced over UART to allow users to play from their desktop computer over a COM connection

# SKILLS

Programming Languages: Python, PowerShell, JavaScript, C/C++, Scala, Java, ARM, Verilog

Frameworks/API: AWS, ROS, Tensorflow, Pytorch, Node.js, Google Sheets API, Mbed OS, Manim, Selenium

Other Technical Skills: Multisim, Autodesk Inventor, 3D Printing Languages: English, Ukrainian (native), Russian (native)