MICHAEL RODYUSHKIN

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EDUCATION

Bachelor of Science in Computer Science

 $Georgia\ Institute\ of\ Technology\ |\ Atlanta,\ Georgia$

- Received Faculty Honors for every semester for maintaining a 4.0 cumulative GPA
- Member of the RoboJackets club and the Phi Kappa Tau Fraternity

EXPERIENCE

Roblox

Software Engineering Intern: Creator Success

- Spearheading a full-stack project to enable creators to identify high-demand, low-adoption assets to create through a metrics chart connected to an AWS-powered API that analyzes billions of our users' search data
- Engaging with a project manager, designer, and backend teams to deliver a production-ready product

Symbotic

Software Engineering Co-op

- Overhauled an ASP.NET and Kibana visualization tool which seamlessly provides analytics (e.g. pallet throughput, robot idle time) for newly designed robotic tasking algorithms of internal teams
- Coordinated with tasking department to implement a backend C# service for a full-stack application that empowers warehouse operators to commission robots to inspect the condition of warehouse structures

Roblox

Software Engineering Intern: Movement Behavior

- Leveraged large language machine learning model with Python and LangChain to develop in-game agents capable of dynamic responses and actions to unprompted environmental stimuli and user interactions
- Explored the capabilities of the agents and communicated the findings to various machine learning teams

Exoskeleton & Prosthetic Intelligent Controls LabAugust 2022 - December 2023Undergraduate Researcher

- Collaborated with a diverse team of over fifty undergraduate, graduate, and postdoctoral researchers to design exoskeleton devices aimed at significantly reducing the metabolic cost of walking for users
- Devised and analyzed a deep convolutional neural network with PyTorch that uses wearable sensor data from a hip exoskeleton to identify changes in users' ambulation surfaces (e.g. stairs, ramps, and flat surfaces)

College of Computing at Georgia TechAugust 2022 - December 2023Teaching Assistant

- Instructed over five hundred students for the Computer Organization and Programming course covering system architecture, pedagogical assembly, and C programming fundamentals
- Tutored over a hundred students in the Introduction to Object-Oriented Programming course taught in Java offering assistance through office hours, recitations, constructed worksheets, and other tutoring services

PROJECTS

Firefly

October 2023

July 2022

October 2021

- Directed a team to develop a React and SASS website that allows professors to get a real-time reading of their classes' confidence during lecture using MongoDB and Python websockets for the backend server
- Won "The Best Emerging Education Application" at Georgia Tech's Hack GT 10 hackathon

Crop Recommendation Predictor

- Final Project for Georgia Tech's CS 4641: Introduction to Machine Learning analyzing which supervised machine learning models are best at predicting the proper plant to grow given soil data
- Designed an ensemble model of the top-performing models to investigate its potential for improved accuracy
- Utilized Python, Jupyter Notebook, and Scikit-learn library for programming and experimentation purposes

GT Dining Detective

• Submission for Georgia Tech's Hack GT 8 hackathon: an Android app that incorporates a neural network to predict the status of Georgia Tech dining halls using Java, XML, Python, and Android Studio

SKILLS

Programming: Java, Python, Kotlin, C, XML, CSS, Lua, HTML, JavaScript, React, Lua, C#, C++

Frameworks & Tools: Android Studio, ASP.NET, AWS, Docker, Git, JSON, Jupyter Notebook, Kibana, Langchain, MongoDB, PostgreSQL, PyTorch, Protobuf, ROS2, Scikit-learn, SQLite, Unity, Websockets

August 2021 – Expected: May 2025

January 2024 – May 2024

May 2023 – August 2023

May 2024 – August 2024