Joseph Campbell

(336) 660-0047 · jcampbell339@gatech.edu · Cornelius, NC linkedin.com/in/campbellbjoseph · github.com/campbellbjoseph

Education

Georgia Institute of Technology

Expected graduation May 2025

Bachelor of Science in Computer Science Bachelor of Science in Mathematics

Experience

GPA: 4.0/4.0

Georgia Tech Research Institute

May - August 2022, January - August 2023

Cloud Development Co-op, CIPHER/SIS CED Team

- Updated software binaries in AWS S3 for desktop apps and rewrote relevant Ansible processes.
- Automated procedure for extracting .msp files for future Office Suite patching using Powershell.
- Debugged AppLocker group policies and revised GPOs to reflect new software updates.
- Applied updated STIGs for Office Suite and validated current hardening processes.
- Wrote and consolidated documentation for above updating/patching processes for future usage.

Art of Problem Solving Inc.

March 2021 - August 2023

Teaching Assistant and Grader in Mathematics and Python

- Answered inquiries for over 200 students during online weekly lectures.
- Graded student responses to proof problems and gave thorough feedback.

Research and Projects

Vertically Integrated Project, Georgia Tech

August 2023 - Present

- Worked on the Extreme Events team to simulate effects of disasters on key infrastructure.
- Gathered and cleaned ground acceleration data from the 2023 Turkey earthquake and aftershocks.
- Wrote parallelized MATLAB scripts to run on TACC Frontera supercomputer on earthquake data.

Music Genre Classification, CS 4641, Georgia Tech

October - December 2023

- Analyzed dataset of 1700 spectrograms of English songs across 16 distinct genres and subgenres.
- Evaluated performance of various supervised and unsupervised ML models such as RF and SVM.
- Achieved an accuracy of over 70% using CNN, with most errors occurring on similar genres.

HackGT 9, Georgia Tech

October 2022

- "Weather or Not" is an extension for Google Calendar that adds weather data into event creation.
- Uses multiple APIs to pull weather, daylight, and geolocation data of the user or the event.
- Weather pop-up is seamlessly integrated into Calendar without interfering with existing features.

Awards and Honors

• Ranked Top 500 Nationally, Putnam Competition

February 2023

• Honorable Mention, Mathematical Contest in Modeling

February 2021

• Faculty Honors, Georgia Tech

December 2021 - Present

• 1st place, GT Fitness Challenge, Open Division

April 2023

Skills

Software: Java, Python, R, C, C++, MATLAB, Ansible, AWS, Agile, Assembly, Docker

Languages: English (native), Russian (advanced), Spanish (intermediate)

Coursework: Machine Learning, Statistics, Artificial Intelligence, Object-oriented

Programming, Data Structures and Algorithms, Multivariable Calculus,

Mathematical Modeling, Computer Organization, Discrete Math, Systems and

Networks, Real Analysis, Complex Analysis