

Russell Newton

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MSCS student at Georgia Tech concentrating and looking for internships in Computer Graphics.

Education

Master of Science in Computer Science

Georgia Institute of Technology (January 2023 to Present)

Expected Graduation: May 2024

Concentration: Computer Graphics

Bachelor of Science in Computer Science

Georgia Institute of Technology (August 2020 to December 2022)

Graduated with Full Honors (GPA: 3.87/4.0)

Concentrations: Artificial Intelligence and Modeling & Simulations

Skills

Languages:	Python, Java, C/C++, GLSL, HLSL
Frameworks/Tools:	Pytorch, Tensorflow, Keras, Unity, Unreal Engine, MySQL, Docker, GitHub Actions
Skills/Theory:	Computer Graphics, Computer Vision, AI/ML, Algorithm Design/Analysis
Mathematics:	Linear Algebra, Multivariable Calculus, Differential Equations
Interpersonal:	Leadership, Communication, Project Planning/Execution, Instructing, Mentoring

Experience

January 2022 to Present: Graduate Teaching Assistant, Georgia Tech

Atlanta, GA

Specifically requested by the professor to be a GTA for CS 4510: Automata & Complexity. Requires strong understanding of course topics: languages, deterministic and nondeterministic finite automata, regular expressions, grammars, Turing machines, and runtime and space complexity analysis and reductions.

June 2022 to December 2022: Software Engineering Intern, ScienceLogic

Reston, VA

Worked to improve data collection for an IT Operations infrastructure platform. Restructured, improved, and tested old code to improve product longevity. Developed utilities to easily switch between Python interpreters and imported members mid-execution. Praised by team for ability to work well under pressure and to learn and adapt quickly.

January 2022 to May 2022: Undergraduate Teaching Assistant, Georgia Tech

Atlanta, GA

UTA for CS 3510: Design and Analysis of Algorithms. Required strong understanding of course topics: divide-and-conquer, dynamic programming, and graph algorithms; and runtime and space complexity analysis and reductions.

Project Spotlight

TikTokPy | [GitHub](#) | [PyPI](#) | [ReadTheDocs](#)

A TikTok data scraping library built with Playwright and Pydantic.

DuckyLighting | [GitHub](#)

A custom lighting engine created for the Ducky One 2 RGB 100%. Runs via a Windows system tray app.

MultiTouch | [GitHub](#) | [Website](#)

With four other students, created a low-level multitouch gesture recognition library in C for L3Harris. Created the tech demo using Emscripten to interface between the Vue frontend and the C library. Created interface to identify repeated taps (double tap, etc.) and to link common touch events. Commended by client for leadership and communication skills.

Not Malware Game | [Game Page \(itch.io\)](#)

Lead the development of an original dungeon-crawler with four other students for GT CS2340: Objects and Design. Recognized by the professor and class as one of the best three games out of the 114 for the Spring 2021 semester.

StatiCat | [GitHub](#)

A custom Discord bot developed in Python.

Leadership

August 2021 to Present: Georgia Tech Rainbow 6: Siege Team Representative

Atlanta, GA

Maintaining the GTR6 community by organizing meetings and matches, coordinating with GT Esports's staff, and strengthening coordination and communication between team members.

August 2016 to May 2020: FIRST Robotics Competition Team 2974

Marietta, GA

Participated as an influential programmer, including one year as Lead Programmer, for Walton High School's FRC team. Co-developed a motion profiling library recognized by several world-class teams for reliability. Created a tool that interpolates data with 2 degrees of freedom with Delaunay triangulation, used for 3+ years. Praised by coach and mentors for leadership and communication skills.

July 2019: Eagle Scout, Boy Scout Troop 795

Marietta, GA

Conceptualized a personal community service project with the National Park Service over the course of two months and led several volunteers in the removal and replacement of a bridge at a local hiking trail. Participated in National Youth Leadership Training and held various troop-level leadership roles.