# ALEXANDER ELLIOTT

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## **EDUCATION**

## Georgia Institute of Technology, Atlanta

August 2018 - December 2021

Candidate for Bachelor of Science in Computer Science.

GPA: 3.89 / 4.0

Concentrations: Systems & Architecture and Information Internetworks.

#### **EXPERIENCE**

#### Georgia Institute of Technology

Undergraduate Research Assistant

January 2021 - Present

Research focused on exploring novel methods of extending internet boundaries. Worked with a team from NAU on an approach to extend connectivity in Native American reservations using LoRa - an Internet of Things protocol. Constructed a pair of compound repeater nodes to demonstrate feasibility of the approach and collect experimental performance results. Currently working with Georgia Smart on implementing methods to extend last-mile connectivity to four under-served rural Georgia communities.

Undergraduate Teaching Assistant

January 2021 - May 2021

Supervised two sections of Computer Networking totaling 180 students. Moderated a student question & answer board and held weekly office hours. Assisted in developing and grading assignments and projects as well as providing constructive feedback and support to students.

## **Progressive Insurance**

Systems Engineer Intern

May 2021 - Aug 2021

Worked with the Systems & Infrastructure Operations team managing and supporting the company's distributed computing environment and supporting server virtualization in VSphere. Added and removed virtual machines as well as reallocated computational resources. Managed servers' status in load balancers during maintenance and system failures. Had a rotation with the Network & Telecom Operations Center helping diagnose and remediate remote claims-site routers and switches. Coordinated directly with remote contacts and vendors such as AT&T, Verizon, and Granite on tunnel repairs.

## **PROJECTS**

#### Analysis of Crime and Its Influencing Agents

Leveraged Apache Hadoop and Hive to perform analysis of big data in the Hadoop Distributed File System searching for trends and correlations between crime data and weather patterns.

# Reaper Farm

Using a Raspberry Pi and socket programming, designed and implemented a fully autonomous growing system for Carolina Reaper plants. Data visualizations, plant status, and controls accessible anywhere through a self-hosted site. This project has produced over 200 peppers and counting!

### TECHNICAL SKILLS

Most Experienced With C, Pythol Some Experience With C++, Ve

C, Python, Java, Arduino, ESP32, Raspberry Pi C++, Verilog, JS, HTML5, SQL, Hadoop, Hive

# EXTRA-CURRICULAR

RoboJackets

August 2018 - August 2020

Constructed a 3-pound drum spinner battle-bot that competed in both local and national tournaments as well as a 30-pound beater-bar bot for the Midwest Robotics Design Competition. Lead the weapons sub-team for the second iteration of Maori - our 30-pound beater-bar bot.