

JOHN WASHBURN

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EDUCATION

Georgia Institute of Technology

BS Computer Science | GPA: 4.0 | 82 Credit Hours Completed

- Concentrations in Intelligence and Modeling/Simulation

Atlanta, GA

August 2020 - May 2023

Clemson University Honors College (Transferred)

BS Computer Science | GPA: 4.0 | President's List

Clemson, SC

August 2019 - May 2020

EXPERIENCE

National Institute of Standards and Technology (NIST)

Software Engineering Intern | Atomic Spectroscopy Group

- Developed an automated calibration procedure for the Electron Beam Ion Trap instrument
- Extensively used NumPy and SciPy as well as statistical concepts of error, uncertainty, and chi-square goodness of fit to achieve a high level of precision and accuracy in the calibration
- Produced research-quality calibrations for use in scientific publications. (Pending Publication and Co-Authorship)

Gaithersburg, MA (Remote)

May 2020 - August 2020

Momentum Management

IT Intern

- Assisted with the implementation of a new management information system.
- Wrote Python scripts to automate data entry roles, scrape convention center data, and categorize cities by geographic location.

Alpharetta, GA

June 2019 - August 2019

Axis Group

Data Science Intern

- Learned various statistical and machine learning methods for interpreting data using SciKit-Learn and Pandas in Python
- Audited training courses and presented a review for upper management team on the quality of each course.

Atlanta, GA

January 2019

SKILLS

Programming Languages Python, Java, C++, C, HTML, CSS, JavaScript

Software Frameworks Node, MongoDB, Express, React, Typescript, Flask, Django, AWS, Google Cloud Products, Docker

Data Science + ML NumPy, SciPy, Pandas, Matplotlib, Web Scraping, TensorFlow, SciKit-Learn

CS Concepts Object-Oriented Design, Data Structures, Algorithms, RESTful APIs, Unit Testing

Software Design Patterns Decorators, Template Hook Pattern, Model View Controller, Observer Pattern, Factory Method Pattern

Mathematics Discrete Mathematics, Probability and Statistics, Multi-Variable Calculus, Linear Algebra

LEADERSHIP AND INVOLVEMENT

HackGT

Tech Team Developer

- Selected through competitive application process to develop software tools for GT's flagship hackathon group, a 501(c)(3) non-profit that throws events for upwards of 1000 participants annually.
- Develop for the check in systems and AppGT subsystems

Atlanta, GA

December 2020-

CS 1332 - Data Structures and Algorithms

Teacher's Assistant

- Grade assignments, assist in recitation teaching, and hold office hours to answer student questions

Atlanta, GA

January 2020-

CUhackit

Tech Director

- Lead a sub-team of developers to organize the annual hackathon hosted by Clemson in January.
- Responsibilities included development of <http://cuhack.it> and participant check-in systems to manage and display data of 250+ participants

Clemson, SC

December 2019-May 2020

Georgia Tech Lacrosse Club

- Practice for 2 hours a day, 3 days a week and compete nationally against other colleges each spring

Atlanta, GA

PROJECTS

Lead Dog | Intelligent Instagram Analysis

- Accessed Instagram's private API to scrape mass amounts of user data
- Created a support vector machine classifier to determine if a particular account is likely to follow the user back
- Generated web crawlers to manage the automatic following/unfollowing of users that are deemed most likely to follow back

Winner: Best Use of MongoDB @ Hacklytics 2020

Kuratorio | Legal Document Translation

- Designed a web app in Flask for converting PDF immigration forms to accessible web forms, available in any language supported by the Google translate API
- Utilized Amazon Textract for pulling text and coordinates from legal documents

Runner-Up: Equity @ HackSC 2020