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## Education

### Georgia Institute of Technology

GPA: 3.6 Atlanta, GA

*B.S. Computer Science, 2022*

*August 2019 - Present*

- Selected courses: Data Structures and Algorithms, Objects and Design, Honors Linear Algebra with Abstract Vector Spaces, Discrete Mathematics, Combinatorics, Statistics and Applications, Macroeconomics

### Thomas Jefferson High School for Science and Technology

Alexandria, VA

*Main Interests: Computer Science, Neuroscience*

*September 2016 - June 2019*

- Selected coursework: Artificial Intelligence, Mobile Application Development, Web Application Development, AP Computer Science A and Data Structures, Neuroscience Research Lab, Neurobiology, Research Statistics

## Skills

**Languages:** Java, Python, JavaScript, Golang, SQL, HTML, CSS, LaTeX

**Software:** Terminal (Linux, Mac), Postman, Android Studio, Firebase, Redis, Visual Studio Code, IntelliJ IDEA, PyCharm, jGRASP, Jupyter Notebook, Google Colab

**Infrastructures:** Git, MySQL, MongoDB, Node.js, Linux OS (Ubuntu, Fedora)

## Experience and Projects

### Tracker-X

Atlanta, GA

*Create-X: Idea to Prototype*

*January 2020 - Present*

- Create a tracking device that has better range than most commercially available tracking tags
- Uses Global Positioning System (GPS) to determine vicinity of device, Radio Frequency Identification (RFID) to identify exact location, and Android/Swift to create a mobile app to easily manage tracking
- Technologies used: Android, Swift, RFID, GPS

### Season2Season

Atlanta, GA

*Agency Club*

*October 2019 - Present*

- Create a tool to change the season of an outdoors picture using a Generative Adversarial Network (GAN) machine-learning model trained with 1000+ images
- Technologies used: PyTorch, Python

### Inline

Durham, NC

*HackDuke*

*November 2-3, 2019*

- Created web application to search for nearby health centers with the specified treatments and sort them by transportation time using Google Maps API
- Technologies used: Flask, Google Maps API, MongoDB Atlas, HTML/CSS/JS

### Stockastic

Atlanta, GA

*HackGT*

*October 25-27, 2019*

- Designed and implemented a web application that helps users to monitor stocks of their interest by conducting sentiment analysis of Twitter tweets about the corresponding companies
- Technologies used: React.js, Express.js, HTML/CSS, MongoDB, Twitter API, Google Cloud Natural Language API

- Software Developer Intern** Greenbelt, MD  
*Fluency Security Corporation* *June 2019 - August 2019*
  - Developed a web-based trouble ticketing system, FasterIncidentResponse, using MongoDB-Gin-Vue.js-Golang fullstack framework, and integrated it into existing log management software
  - Created developer's guide documentation with Postman, Markdown, and Web Developer tools
  - Unit tested log management software with Golang's unit testing framework
  - Technologies used: Golang (including Gin server), MongoDB, Bootstrap, Vue.js, Node-RED, Visual Studio Code
- Tetris: Forty Lines** Alexandria, VA  
*Mobile Applications Development* *March 2019 - June 2019*
  - Implemented a swipe-capable Tetris Android app in Android Studio with Java backend
  - Technologies used: Android Studio, Java
- Arcade Game Suite** Alexandria, VA  
*Web Applications Development* *September 2018 - January 2019*
  - Designed and developed web-based suite of games, including U.S. Minesweeper, Tetris, and a word-finder assistant for Scrabble
  - Technologies used: HTML/CSS/JS (including jQuery, AJAX), SQL, Node.js
- Website Developer and Administrator** Chantilly, VA  
*Hope Chinese School* *August 2018 - December 2018*
  - Helped develop and administer a new website for cultural and enrichment center serving 5000 users
  - Former administrator of the website, managing a system of tens of thousands of users.
  - Website: <https://www.hopechineseschool.org>
  - Technologies used: HTML/CSS/JS, Django, SASS

## Research Experience

- Migraine Research** Great Falls, VA  
*Neuroscience Research Lab* *June 2018 - January 2019*
  - **Title:** Exploration of Two-Dimensional Materials for Inhibition of the Calcitonin Gene-Related Peptide Pathway in Migraines
  - Employed high-performance CPU cluster and slurm management in collaboration with high school's computer systems lab
  - Continued using ABINIT, an open-source package for making predictions about molecular systems based on solving quantum physics equations.
  - Research proposal accepted by neuroscience research lab at high school, received guidance and \$2400 funding for project
- Alzheimer's Disease Research** Alexandria, VA  
*Project Lead* *June 2017 - August 2017*
  - **Title:** Exploration of Chelation Materials for Treatment of Alzheimer's Disease
  - Used ABINIT, an open-source package for making predictions about molecular systems based on solving quantum physics equations.
  - Submitted to Siemens Competition 2017, achieved the semifinalist award

## Community Leadership

- Instructor of Introductory Computer Science** Chantilly, VA  
*Hope Chinese School* *January 2015 - June 2019*
  - Co-founded and instructed first computer science course in Hope Chinese School
  - Outstanding service recognition for multiple years (2017, 2018) for voluntary service, received paid position in 2018-2019 school year