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Education

Georgia Institute of Technology — Atlanta, GA
B.S. Computer Science, 2023 (Planned minor in Biomedical Engineering) — *August 2019 - Present*

- Threads: intelligence and info-networks
- Coursework: Data Structures and Algorithms, Linear Algebra with Abstract Vector Spaces, Statistics and Applications

Thomas Jefferson High School for Science and Technology — Alexandria, VA
Main Interests: Computer Science, Neuroscience — *September 2016 - June 2019*

- Computer Science Courses Taken: Mobile Application Development, Web Application Development, Artificial Intelligence, AP Computer Science A Plus Data Structures
- Neuroscience-Related Courses Taken: Neuroscience Research Lab, Neurobiology, AP Biology

Computer Science Skills

Languages: Java, Python, Golang, JavaScript, Node.js, HTML, CSS, SQL (MySQL and MongoDB), Markdown, Git, Latex, Bash

Software: Postman, Linux OS (Ubuntu and Fedora flavors), Node-RED, Android Studio, Firebase, Visual Studio Code, IntelliJ IDEA, PyCharm, jGRASP, Microsoft Office, Microsoft Windows

Miscellaneous: Great troubleshooting and debugging skills, great at explaining concepts to other people

Projects (Computer Science)

- **FasterIncidentResponse (FaIR)** — Greenbelt, MD
  Fluency Security Corporation — *June 2019 - August 2019*
  - Developed a MongoDB-Gin-Vue.js-Golang webstack for a trouble-ticketing system (TTS), formatted with Bootstrap, as an intern
  - Wrote first copy of developer documentation using Postman, Markdown, and Web Developer tools
  - Unit tested functions using Golang's default unit testing framework
  - Learned fundamental security incident and event management (SIEM) skills, as well as internet structure, HTTP protocols, and unit testing
  - Technologies used: Golang (including Gin server), MongoDB, Bootstrap, Vue.js, Node-RED, Visual Studio Code
- **Swipe-based Tetris** — Alexandria, VA
  Mobile Applications Development — *March 2019 - Present*
  - Independent developer of swipe-based, instead of touch-based, Android application for Tetris.
  - Majority of current mobile applications for Tetris are touch (button)-based, and is very awkward given the area of a smartphone.
  - Technologies used: Android Studio, Java, XML

- **LegiChat** Alexandria, VA
  HackTJ 6.0 *April 2019*
  - Developer of the LegiChat hack for HackTJ 6.0
  - Motivated by the lack of a unified method of contacting local Congresspeople, as well as the Phone2Action challenge.
  - Technologies used: Phone2Action API, HTML, CSS, JS, Node.js, Python (for scrapping data, elastic search), Git

- **Personal Website** Alexandria, VA
  Web Applications Development *September 2018 - January 2019*
  - Personal website with projects/coding exercises
  - Arcade-style website featuring games, such as U.S. Minesweeper and Tetris, as well as game-assisting tools, such as a Scrabble word finder
  - Initially created for Web Applications Development course, later expanded website for other projects.
  - Technologies used: HTML/CSS/JS (including jQuery, AJAX), SQL, Node.js

- **Website Developer** Great Falls, VA
  Hope Chinese Schools *August 2018*
  - Helped form the Django server, contributed a "Student Corner" feature
  - Assisted with website development, currently administrate the website
  - Technologies used: HTML/CSS/JS, LAMP/WAMP Stack, Node.js

- **Neural network** Alexandria, VA
  Artificial Intelligence 2 *May 2018*
  - Developed neural network to detect points within a certain radius of a point using Keras, a Python wrapper for Google's Tensorflow
  - Practical exercise used to familiarize with neural networks
  - Technologies used: Python, Keras API

- **Othello AI** Alexandria, VA
  Artificial Intelligence *December 2017 - January 2018*
  - Coded an AI that can intelligently play the classic board game Othello
  - Explored algorithms in AI, including BFS/DFS, minimax (and negamax), α-β pruning
  - Technologies used: Python

- **CardBot** Alexandria, VA
  HackTJ 4.0 *March 2017*
  - Developed a proof-of-concept hack for finding best credit card options given user input from a Facebook Messenger chat-bot, used Capital One's API
  - Won Best Entrepreneurial Hack
  - Technologies used: Python, Facebook Messenger API, Capital One Hack-a-thon API

Research Experience (Computer Science + Neuroscience)

- **Migraine Research** — Great Falls, VA
  Independent Research — *June 2018 - January 2019*
  - **Title**: Exploration of Two-Dimensional Materials for Inhibition of the Calcitonin Gene-Related Peptide Pathway in Migraines
  - Used high-performance CPU cluster and slurm management in collaboration with high school's computer systems lab
  - Continue using the quantum physics-based, open-source package ABINIT
  - Research proposal accepted by neuroscience research lab at TJHSST, received guidance and funding for project
  - Submitted to Intel Science Talent Search, will present at the Thomas Jefferson Symposium to Advance Research 2019
- **Alzheimer's Disease Research** — Alexandria, VA
  Project Lead — *June 2017 - August 2017*
  - **Title**: Exploration of Chelation Materials for Treatment of Alzheimer's Disease
  - Team lead for research regarding 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
  - Competed in science and engineering fairs, placed 2nd at the Virginia State Science and Engineering Fair

Community Leadership

- **Introductory Computer Science, Hope Chinese Schools** — Chantilly, VA
  Co-founder and Instructor — *January 2015 - June 2019*
  - Co-founder and main instructor for introductory computer science class at the Westfield High School location of Hope Chinese Schools
  - Inspired the creation of computer science classes at HCS
  - Outstanding service recognition for multiple years (2017, 2018)
- **NeuroInspire Inc.** — Alexandria, VA
  Instructor — *September 2016 - May 2017*
  - Instructor for the NeuroInspire outreach program and 2017 NeuroInspire Impulse event
  - Taught underpriveliged middle schoolers in the outreach program
  - Worked with TJ Partnership Funding to acquire funding for $10000 worth of equipment