Brian Pak

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EDUCATION

Georgia Institute of Technology | Atlanta, GA   Expected Graduation: May 2024
B.S – Computer Science, Concentrations: Intelligence & Media   *GPA: 3.12*
Coursework: Data Structures & Algorithms (Java & C++), Object-Oriented Programming, Computer Organization, Systems Programming, Automata & Complexity Theory, Combinatorics, Discrete Mathematics

EXPERIENCE

GT WebDev | Software Developer   *August 2022 - Current*
- Collaborated with a team to Agile development process to develop a game-based learning platform that guides users in exploring new music.
- Designed and implemented user authorization on Spotify API with PKCE extension, allowing client secrets to be secured while communicating information with Spotify servers.
- Maintained real-time data of 'upvotes' and 'downvotes' of certain songs/albums using WebSockets API, supporting 'multiplayer' functionality.

Freelance Personal Tutor   *August 2021 - May 2022*
- Prepared personalized lessons in programming fundamentals and object-oriented programming to aid 6 economically-disadvantaged high school students in preparing for advanced standing exams.
- Composed guides with Notion to assist 3 students at the University of Georgia in studying Automata Theory and Data Structures, helping raise their academic performance by an average of 6%.

PROJECTS

Unix Utilities | *C*
- Implemented a collection of 8 Linux/UNIX command-line commands, including head, tail, env, and wc.
- Employed C Standard Library Functions to make system calls to the Linux Kernel, allowing the implementation work directly with the device's operating system.

Stranger Things Showdown! | *C*
- Programmed a Stranger Things-themed rock, paper, scissors video game for the GameBoy Advance.
- Encoded graphics for 7 Stranger Things characters and background scenery into the game by manipulating Direct Memory Access functions and implemented game logic using C programming.

Geography Quiz | *JavaFX, JUnit, Maven*
- Developed a GUI for an interactive geography quiz, which asks players to pair countries with their corresponding continents.
- Built the frontend of the interface with JavaFX and organized the project through Apache Maven.

EXTRACURRICULARS

The Agnecy   *January 2022 - May 2022*
- Implemented a deep neural network of three layers in Python that interprets over 10,000 handwritten digits MNIST data to understand fundamental deep learning concepts and basics to ML Libraries.
- Attended lecture meetings to gain awareness about other AI subfields of interest, like Reinforcement Learning, Machine Learning Theory, and Computer Vision.

SKILLS

Languages: Java, C, C++, JavaScript, HTML/CSS, Python
Technologies: Git, React.js, styled-components