Cameron Toy

Albertson, New York
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Education

University at Buffalo, The State University of New York **Aug. 2020 – Expected May 2024**
Bachelor of Science in Computer Science, GPA: 3.62 *Buffalo, New York*
Mathematics *: Calculus I & II, Linear Algebra, Statistics - Calculus Based*
Computer Science *: Object-Oriented Programming, Data Structures, Algorithms and Complexity, Artificial Intelligence, Web Applications, Systems Programming, Computer Organization*

Experience

Stony Brook Administrative Services, LLC **Aug. 2020 – Aug. 2022**
Software Developer Intern *Commack, New York*

- Implemented an inventory application that manages current items in inventory and generates a report of incoming and outgoing items to different practice locations using Python.
- Created a temporary solution that automated daily file encryption and transfers to the Phreesia database in Python.
- Utilized Microsoft Access Database, Python, and Tableau to merge over 70% of the patient records which saved over several months of manual work.
- Designed a Lucidchart workflow diagram to streamline invoice production and completion rate.

Projects

UniMarket | | *React, Express, Node, MongoDB*

- Collaborated with a team of 3 to create a central e-commerce application for students to buy and sell used items.
- Created profile page component with React.js to show user's current posts and transactions.
- Implemented REST APIs to store user postings, login, and registration information with encryption and cookies authentication.

Chess Engine | | *Java*

- Built a Chess Engine that utilizes standard chess notation allowing compatibility with other chess programs.
- Applied iterative deepening and minimax algorithm with alpha beta pruning to suggest the next best possible move.
- Utilized Object-Oriented Programming and JUnit unit testing framework to create a Chess Game that follows all Chess principles.

Data Structures - CSE 250 | *Scala*

- LSM Tree: Created a Log-Structured Merge Tree, used extensively in big-data processing systems, which stores data in a sequence of exponentially growing levels where every layer except the 0th is a sorted array, and immutable.
- Data Deanonymization: Applied relational database joins to cross-reference voter records to deanonymize and identify corresponding health records.

Systems Programming - CSE 220 | *C*

- Dynamic Memory Allocator: Built a dynamic memory allocator suitable for replacing malloc() for heap memory in a Unix process.
- Instant Messenger: Created a message encoder and decoder for a basic instant messaging application using pointer arithmetic, raw memory access, and data serialization.

Leadership / Extracurricular

Chinese Student Association **Aug. 2022 - Present**
Executive Board *Buffalo, NY*

- Coordinated online and in-person social events with the other eight members of the e-board on a limited budget.
- Managed the Event Operations Team for a variety of social events and other work activities on a weekly basis.

Herricks Freshman Focus **Aug. 2019**
Volunteer *New Hyde Park, NY*

- Provided necessary information for incoming 9th grade students to have a smooth transition into a high school environment.
- Guided incoming 9th grade students around to school and explained the clubs and activities offered by the high school.

Technical Skills

Languages/Frameworks: Python, Scala, Java, C (Programming Language), HTML/CSS, JavaScript, React, SQL
Developer Tools: VS Code, IntelliJ, Emacs, Figma, GitHub, Git
Technologies: Linux, MacOs, Windows