Brandon Wong

New York Metropolitan Area

Education

Stony Brook University

Aug. 2022 - Dec. 2025

Bachelor of Science in Computer Science

Stony Brook, NY

Experience

WebGen Aug. 2024 – Jan. 2025

Undergraduate Researcher | Javascript, HTML, CSS

Stony Brook, NY

- Engineered a responsive web platform aggregating health data from 4 APIs, visualized through 8 dynamic charts and heatmaps using JavaScript and Plotly.js.
- Streamlined medical research workflows by creating a tool with SerpAPI to fetch up to 10 relevant articles from Google Scholar.

Stony Brook University

Sep. 2023 - Jan. 2024

Undergraduate Researcher | R, Javascript, HTML

Stony Brook, NY

- Identified key health trends by analyzing 42 datasets with R and JavaScript, addressing challenges across 127 districts.
- Presented actionable insights and data visualizations to faculty, influencing the direction of public health strategies.

Projects

Reddit Clone | React, Node.js, Express.js, MongoDB, JWT, Git

Sep. 2024 - Dec. 2024

- Developed a robust social media platform enabling users to create posts, join communities, and engage in discussions with secure JWT-based authentication.
- Designed and built advanced admin tools for managing users, posts, communities, and comments, enhancing administrative control and platform oversight.
- Incorporated MongoDB for scalable data storage and React for a dynamic, responsive user interface, delivering a seamless and interactive user experience.

Stock Tracker | React, Node.js, Express.js, MongoDB, Mongoose, Git

Jun. 2024 - Aug. 2024

- Designed and implemented a stock trading platform offering portfolio management, real-time stock price updates, and trade history tracking using React and MongoDB.
- Integrated Yahoo Finance and Alpha Vantage APIs for live stock data and ticker symbol search functionality, providing accurate and seamless user experience.
- Architected the application using the MVC design pattern and RESTful APIs, optimizing scalability and client-server communication for real-time performance.

Todo App | React, Node.js, Express.js, PostgreSQL, Bootstrap, JWT, Git

Aug. 2024

- Built a secure task management app with JWT-based authentication and full CRUD operations for user task management.
- Designed an intuitive frontend and robust backend, enabling seamless user interaction and efficient data storage.

Dynamic Memory Allocator | C, Linux

Mar. 2024

Stony Brook University

- Constructed a high-performance memory allocator with malloc, free, and memalign functions, leveraging first-fit policy and immediate coalescing from scratch.
- Optimized memory utilization through advanced design techniques, ensuring reliability and efficiency in dynamic memory management.

Technical Skills

Fundraising Head

Languages: Java, Python, JavaScript, C

Technologies/Frameworks: React, Node.js, MongoDB, SQL (Postgres), JWT Developer Tools: Git, VS Code, Postman API, Linux, Agile Development

Leadership / Extracurricular

ChinaBlue Jan. 2024 – Present

- Managed a \$10,000 budget and spearheaded fundraising events, achieving a 60% profit margin.
- Led bi-weekly strategy meetings to plan and execute initiatives with a focus on collaboration and impact.