Brandon Wong

Education

Stony Brook University

Sept. 2022 - Dec. 2025

Bachelor of Science in Computer Science

Stony Brook, NY

• Relevant Coursework: Data Structures, Analysis of Algorithms, Software Development, Systems Programming

Experience

WebGen Aug. 2024 – Present

Undergraduate Researcher | Javascript, HTML, CSS

Stony Brook, NY

- Collaborated with a team of 4 to aggregate health data from 4 APIs and visualize it using JavaScript and Plotly.js, enhancing data accessibility in the health sector through a deployed website.
- Designed and implemented interactive visualizations for cancer genomics data, offering 8 distinct charts, graphs, and heatmaps for comprehensive analysis.
- Engineered a tool to retrieve up to 10 current medical research articles from Google Scholar using SerpAPI, streamlining the research process.

Stony Brook University

Sept. 2023 - Jan. 2024

Undergraduate Researcher | R. Javascript, HTML

Stony Brook, NY

- Integrated 42 diverse data sources, using Javascript and R to illuminate key health trends across various populations and concerns.
- Initiated the development of impactful solutions to address regional health challenges across 127 districts.
- Presented data-driven insights and findings to faculty and team members, contributing to the strategic development of public health initiatives.

Projects

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

Sept. 2024 - December. 2024

- Engineered a web application supporting user-generated content, community management, and interactive discussions, utilizing React, Node.js, Express, and MongoDB.
- Integrated JWT-based authentication, ensuring secure user access and data protection across the platform.
- Created a comprehensive interface for administrators to efficiently manage users, posts, communities, and comments, enhancing overall platform oversight and control.

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

June 2024 - Aug. 2024

- Developed a full-stack stock tracking application utilizing React, Node.js, and MongoDB for real-time stock data, portfolio management, and trade history.
- Integrated 2 APIs to fetch live stock data, providing accurate price updates and enhanced search functionality with ticker symbol suggestions.
- Architected the application using MVC design principles and implemented REST API operations to optimize communication between the client, server, and database.

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

Aug. 2024

- Built a full-stack Todo application featuring JWT-based authentication, allowing users to register, log in, and manage their tasks with full CRUD functionality.
- Implemented a backend using Node.js, Express.js, and PostgreSQL, and used RESTful API principles for all user
 operations.

Dynamic Memory Allocator | C, Linux

Mar. 2024

- Implemented from scratch, a dynamic memory allocator with malloc, free, and memalign functions.
- Used design strategies such as first-fit policy, immediate coalescing, and block splitting in C.

Leadership / Extracurricular

ChinaBlue

Spring 2024 – Present

Stony Brook University

- Successfully managed a budget exceeding \$1000, orchestrating fundraising initiatives that generated over 50% in profit.
- Led bi-weekly meetings, focusing on collaborative planning and execution of fundraising events.

Technical Skills

Fundraisina Head

Languages: Java, Python, JavaScript, Ruby, SQL (Postgres), C

Technologies/Frameworks: React, Node.js, Express.js, MongoDB, JWT

Developer Tools: Git, VS Code, Postman API, Linux, Agile