CHRISTOPHER CHEN

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EDUCATION

BROWN UNIVERSITY Providence, RI| 09/2022 - 05/2026
Sc.B in Applied Mathematics—Computer Science *Cumulative GPA: 3.88/4*

Relevant Coursework: Operating Systems; Computer Vision; Design and Analysis of Algorithms; Software Engineering; Numerical Optimization; Operations Research in Probabilistic and Deterministic Models

SKILLS

Languages: Java, Python, C/C++, Javascript, HTML/CSS, Matlab, R
Technologies: React, Express.js, Node.js, Flutter, MongoDB, Django, Git, Docker, VIM, Figma, TailwindCSS

PROFESSIONAL EXPERIENCE

Vane, *Software Engineering Intern* *July 2024 - August 2024*

- Worked in an Agile environment to develop a reactive, declarative mobile app using Flutter and a web app using React, TailwindCSS, Node.js, and Express.js, facilitating event advertisements and social party planning for businesses, communities, and users
- Developed a web scraping system using Python, pandas, and Beautiful Soup to automate the collection of event data, integrating it with MongoDB schemas for efficient data management
- Designed and implemented backend features including social party chat creation and Google Maps API integration, contributing to the end-to-end development and enhancing user interaction with the app

TetherView, *Data Analysis and Marketing Intern* *January 2022 - June 2022*

- Developed web scraping algorithms using Python to collect and analyze vast datasets on web traffic and keyword frequencies to write effective meta descriptions and ad copies for TetherView's website, leading to a 20% increase in TetherView's website traffic
- Created, edited, and published advertising material for TetherView's blog and YouTube channel, garnering hundreds of views for each domain

PROJECTS

Weenix OS, *CSCI2670: Operating Systems* *Spring 2024*

- Engineered a comprehensive operating system kernel in C, based on Unix, over 14 weeks
- Managed user address spaces by implementing memory objects, virtual memory mapping, and system calls to ensure seamless interaction between user and virtual interfaces
- Designed and integrated core components, including virtual file systems, on-disk file systems, and process and thread synchronization primitives, to create a robust and efficient operating system

Tomorrow@Brown, *Hack@Brown* *Spring 2024*

- Constructed a system that accepts user queries and returns the most relevant emails regarding on-campus events to streamline event information access
- Led as the frontend developer on team, which involved designing the user experience, implementing several landing pages using Javascript, HTML, CSS, and interactive React components
- Utilized the TF-IDF algorithm and cosine similarity to accurately rank emails based on user queries, optimizing responsiveness to verbose prompts

TuneTailer AI, *WIP* *Summer 2024*

- Developing an AI-powered system that generates personalized Spotify playlists based on user inputs such as mood, key signature, and tempo, enhancing music discovery and personalization
- Implementing Spotify API integration to fetch song attributes and create custom playlists
- Using Django for backend development to manage user authentication and server-side logic, and React with Tailwind CSS for frontend development