

CHRISTOPHER CHEN

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EDUCATION

BROWN UNIVERSITY

Sc.B in Applied Mathematics—Computer Science

Providence, RI | 09/2022 - 05/2026

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: Python, Java, C/C++, Javascript, Dart, HTML/CSS

Technologies: React, Express.js, Node.js, RESTful API, MongoDB (NoSQL), SQL, Django, Flutter, Git, Docker, VIM, Figma, TailwindCSS

PROFESSIONAL EXPERIENCE

Vane, Software Engineering Intern

July 2024 - Present

- Working in an Agile environment to develop an end-to-end reactive, declarative mobile app using Flutter and a web database editor app using React, TailwindCSS, Node.js, and Express.js for use upcoming startup funding application deadlines
- Aiding in the research and development of a social party chat feature for the mobile app, contributing to relevant server side code and the creation of MongoDB schemas and atlas functions
- Developing a web scraping system using Python, pandas, and Beautiful Soup to automate the collection of event data with MongoDB aggregation pipeline for Vane's event information collection

TetherView, Data Analysis and Marketing Intern

January 2022 - June 2022

- Developed web scraping algorithms using Python to collect and analyze datasets on web traffic and keyword frequencies relevant to TetherView's target audience to write effective meta descriptions and ad copies for the company 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 under 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, implementing several landing pages using Javascript and React components and connecting backend to frontend endpoints
- Leveraged the TF-IDF algorithm and cosine similarity to accurately rank emails based on user queries, optimizing responsiveness to verbose prompts

TuneTailer AI

Summer 2024

- Developed an AI-powered system to generate personalized Spotify playlists based on requested mood and tempo
- Implemented a transformer NLP model to analyze sentiment in user requests and fetch songs through Spotify's API, creating curated playlists with user authorization
- Utilized Flask for server-side logic and routing management, and React with Tailwind CSS for frontend development