

CHRISTOPHER CHEN

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EDUCATION

BROWN UNIVERSITY

Providence, RI | 09/2022 - 05/2026

- Sc.B in **Applied Mathematics—Computer Science** (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

PROFESSIONAL EXPERIENCE

TetherView, *Data Analysis and Marketing Intern*

Oceanport, NJ | 01/2022 - 06/2022

- 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

Language Journal AI App, *WIP*

Summer 2024

- Engineering an interactive web application and Chrome extension to assist language learners by generating personalized vocabulary lists based on user-input topics and enabling users to submit their own journal entries
- Utilizing machine learning techniques to accurately generate contextual relevant vocabulary suggestions and definitions through extensive language model training

SKILLS

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