CHRISTOPHER CHEN

Marlboro, NJ 07746 • christopher.chen.1004@gmail.com • + 1 (732) 500-8065 • LinkedIn • Github

EDUCATION

Brown University Providence, RI

• Sc.B in **Applied Mathematics—Computer Science** (GPA: 3.88/4)

09/2022 - 05/2026

• Relevant Coursework: Operating Systems; Design and Analysis of Algorithms; Computer Systems; Introduction to Software Engineering; Numerical Optimization; Operations Research

PROFESSIONAL EXPERIENCE

TetherView Oceanport, NJ

Data Analyst and Marketing Intern

01/2022 - 06/2022

- Developed advanced web scraping tools using Python to collect and analyze vast datasets on web traffic and keyword frequencies, leading to a 20% increase in website traffic
- Utilized analyzed data to write effective meta descriptions/ad copies for TetherView's website and subpages
- Created, edited, and published advertising podcast videos onto TetherView's YouTube channel

PROJECTS

Weenix OS, CSCI2670: Operating Systems

Spring 2024

- Engineered a comprehensive operating system kernel, based on Unix, as part of a semester-long project for the graduate course CSCI2670 at Brown University
- Managed user address spaces by implementing memory objects, virtual memory mapping, and critical system
 calls (fork and brk) 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 Spring 2024

- Constructed a system that accepts user queries and returns the most relevant emails regarding on-campus events to streamline event information access
- Utilized the TF-IDF algorithm and cosine similarity score for accurate ranking of emails based on user queries, optimizing responsiveness to verbose prompts
- Developed an interactive website with a user-friendly interface, incorporating user feedback mechanisms to continuously enhance the user experience

TuneTailer AI, WIP Summer 2024

- Developed 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
- Implemented Spotify API integration to fetch song attributes and create custom playlists
- Designed a web interface using Flask, HTML, and CSS to provide an intuitive user experience for playlist generation and customization

Language Journal Al App, WIP

Summer 2024

- Engineered 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
- Utilized machine learning techniques to accurately generate contextual relevant vocabulary suggestions and definitions through extensive language model training

SKILLS

- Technical Skills: Java, Python, C/C++, Javascript, React, Git, HTML/CSS, Matlab, R
- Technologies: Figma, TailwindCSS, Latex, Microsoft Office, Autodesk Inventor, Fusion 360