49899 Leyland Cir Novi, MI 48374 www.chriszhang.io

CHRIS ZHANG

(248) 231-7065 czhang2003@gmail.com github.com/chriszhang08

EDUCATION

University of Michigan

Ann Arbor, MI

Aug 2021 - Dec 2024 (Expected)

- B.S.E in Computer Science and Environmental Engineering, GPA: 3.96
- Undergraduate Coursework: Discrete Maths, Intro to Sociology, Data Structures and Algorithms, Organic Chemistry, Statics and Dynamics, Linear Algebra, Computer Organization, Database Management Systems.
- Organizations: Tau Beta Pi Electee, Michigan Ski and Snowboard Club, Michigan Scuba Club, Michigan Backpacking Club.

EMPLOYMENT

Power Delivery IT Intern

NextEra Energy | Juno Beach, FL

May 2022 - Aug 2022

Developed and supported the Storm Damage Model, a .NET website used to predict resource allocation during hurricane season. I did data engineering, cloud engineering, and full-stack development, working closely with various internal and external teams.

- Automated migration of on-premise real-time asset data to AWS Aurora, and the writeback of non-formatted model results back to the on-premise MSSQL database using Lambda, DMS tasks, Step Functions, S3 triggers, and SQL.
- Programmed asynchronous Javascript fetch API server requests to display and cache back-end data on demand for .NET web application, decreasing the amount of user click points by 50%.
- Remodeled website's stack to .NET core back-end and Next.js + Tailwind front-end, improving cybersecurity protection and facilitating developer and user experience.
- Deployed over 4000 lines of code to production, adhering to agile and DevOps methodologies.

Instructional Aide | EECS 280

UM CSE Faculty | Ann Arbor, MI

Jan 2022 - present

Accelerated learning and belonging as a teaching aide for the 2nd core programming class with over 3000 students each year.

- · Guided weekly lab sessions of 40 students, fostering inclusion and belonging among diverse student groups.
- Organized weekly 4 on 1 coaching sessions customized to each student, focusing on fundamental programming concepts.
- Created and graded exam questions that are equitable and accurately assess the transferable knowledge of material.

PROJECT EXPERIENCE

Environmental Projects

Battery Recycling Initiative:

Mar 2022 - present

A personal project to mitigate the environmental damages of disposable e-cigarettes (vapes), and to inspire greener lifestyles.

- Coordinated a vape collection system, leveraging student organizations to recycle 50+ vapes to hazardous waste facilities.
- Promoted the initiative through fliers and word-of-mouth creating a brand focused around battery recycling.

• University of Michigan Solar Car:

Sep 2021 - present

Active member of UM Solar Car, a club that builds a 100% solar-powered car and competes in competitions around the world.

- Derived the Mitsuba motor constant using machine learning, data modeling, and experimental testing, which was necessary
 for the team to optimize the worth-of-charge calculations.
- Researched the efficiency of solar energy irradiance on the arrays, discovering a 5% deficiency ignored in model.

Technical Projects

• BettingScraper:

Dec 2021 - Feb 2022

Hired along with another individual to build an application that would update a sports betting dashboard in real-time.

- Expedited data from 8 different sports betting websites to centralized 24 million cell Excel spreadsheet.
- Refined scraping algorithm until it reached a 1 minute runtime, enabling real-time decision making for the user.

• TheFantasyAnalyst:

Nov 2020 – July 2021

First large-scale project inspired by the want for further analysis behind personal poor fantasy football team performance.

- Built full-stack Python + React Native cross-platform mobile app with 10+ calculated metrics for team/league performance.
- Conceived the most accurate metric of fantasy football team strength the one-vs-all record, which was marketed to ESPN
 Fantasy developer teams.

AWARDS AND CERTIFICATIONS

- NextEra Energy: Lean Six Sigma Yellow Belt
- University of Michigan Black Business Undergraduate Society (BBUS): 3rd Place Case Competition
- Novi High School: Top 6 Scholar
- Professional Association of Diving Instructors (PADI): Open Water Diving Certification
- Duolingo: 328 Day Streak (Spanish)

SKILLS AND TECHNOLOGIES

- Technical Skills: Java, AWS, C++, Python, MySQL, Javascript, .NET, ASP.NET, CSS, HTML, React, C#, Pycharm, Visual Studio
- Just for Fun Skills: Piano, Salsa Dancing, Chess, Skiing, Golf, Tennis