

Joanne Tsai

chihant@andrew.cmu.edu | +1 412-576-8364 | linkedin.com/in/joannetsai21/ | joannetsai.com

EDUCATION

Carnegie Mellon University

May 2024

Bachelor of Science in **Information Systems**

Minor in Human-Computer Interaction & Business Analytics and Optimization

- GPA 3.8/4.0, Dean's List with High Honors for 3 semesters
- Relevant Coursework: Principles of Imperative Computation, Fundamentals of Programming & CS, Application Design & Development, Foundations of Software Engineering, Web Application Development, Programming Usable Interfaces

SKILLS

Programming: JavaScript, Python, Java, C++, C, HTML/CSS, Ruby, Ruby on Rails, REST API

Database: SQL, MongoDB, BigQuery, R, Stata, Tableau, data visualization, database design

Design: Figma, prototypes, wireframes, storyboards, mockups, dashboards, responsive web design, user-centered design

Languages: English (fluent), Mandarin (fluent)

EXPERIENCE

Carnegie Mellon University *Teaching Assistant (Database Design & Development)*

Aug 2022 - Present

- Teach ~20 students about database design, SQL, and MongoDB queries through weekly labs
- Mentor 6 teams through database projects on refining user stories, revising relational model and functional dependencies, and debugging PostgreSQL queries
- Hold weekly office hours and grade assignments on Jupyter Notebook

Google *STEP Intern (Student Training in Engineering Program)*

May - Aug 2022

- Refactored code to enhance performance and safety of a developer tool used across Google Nest cameras
- Designed implementation process flow and integrated a third-party library API for development
- Contributed to product unit test writing and automation in C++

CMU Human-Computer Interaction Institute *Research Assistant*

Jan - May 2022

- Collaborated with the peer support platform 7 Cups to personalize online therapy services through data analytics
- Performed data migration and analysis on 1M+ user records using AWS, MySQL, BigQuery, and Stata

PROJECTS

Teedy Document Management System

Sep 2022 - Present

- Learn the codebase and functionalities of an existing software project Teedy and identify absent features
- Collaboratively program 3 feature additions across front-end user experience, middleware data transmission, and back-end service using HTML, Angular.js, REST API, and Java in a team of 4

Great Pittsburgh Baking Outlet

Feb - May 2022

- Analyzed business goals of a baking outlet and prototyped dashboard UI on web metrics
- Created user stories for three roles (administrator, customer, shipper) and developed a relational database
- Implemented the Model-View-Controller pattern to build an e-commerce web application from scratch using Ruby on Rails and Materialize CSS

HealthConnect.

Mar - Apr 2022

- Designed and prototyped 3 iterations using Figma based on usability testing feedback
- Developed a website using HTML, CSS, and JavaScript to improve UI and the appointment scheduling process including adding, updating, and canceling appointments and storing user data for CMU Health Services

LEADERSHIP & ACTIVITIES

CMU Women in Information Systems *Lead Mentor*

Aug 2022 - Present

- Hold bi-weekly general body meetings to organize social events and career panels for ~60 members
- Provide academic advice and guidance on professional goals to 2 aspiring underclassmen

CMU Business Technology Group *UI/UX Designer, Data Scientist*

Feb 2022 - Present

- Lead the UI/UX design portion for an upcoming full-year website development project in Fall 2022
- Integrated database from CMU Faculty Course Evaluations to MongoDB and connected to Node.js application to build an improved version of the current platform in Spring 2022