Angela Zhou

Los Angeles, California, 91780 • angzla329@gmail.com • 626.272.5146

EXPERIENCE

COMCAST NBC Universal

Technology Intern

Operations & Technology Production Engineering

05/2024-08/2024

- Increased team workflow efficiency and accuracy 70% by using Python and power tracking software / AutoCAD React APIs to script data conversion automation application
- Designed and demoed an audiobook app for the tv, created backend to use voice remote to find, check out, and play audiobooks through local public library API, as well as using Spotify API for searching and playing podcasts through a deep link.
- Designed, created, and pitched a proof of concept for a capstone project aimed at increasing young voter engagement through social
 media with a user generated election data summary in NBC news app, utilizing Figma UI/UX design, analyzing market trends, machine
 learning, and exploring business use cases.

Research & Development Labs

05/2023-08/2023

- Utilized Flutter, Lightning, Figma, and JavaScript to develop engaging frontend pages on Android (such as a notification screen and tabs) for Android and iOS applications, enabling seamless NFT collection and improving user engagement.
 - Employed TypeScript, Strapi, and API calls to establish a robust backend system for the trivia and game components of the aforementioned application.
 - o Implement large language models into backend to automate content generation for app
- Developed the frontend of a TV application connecting small businesses with Comcast, utilizing Lightning and JavaScript.
- Created live audio to text transcription/translation for AR/VR headset using Python and Unity for accessible communication
- Designed, created, and presented a proof of concept for a capstone project aimed at helping parents filter TV content through UI/UX design, analyzing market trends, dataflow management, and exploring business use cases.
- Conducted in-depth research and applied Neural Radiance Fields into AR/VR headsets to develop immersive video to 3D content

EDUCATION

Scripps College 2021-2025 Claremont, CA

B. A.; Data Science Major Honors; Computer Science Minor; GPA: 3.88; Magna Cum Laude, Dean's List

Coursework: Data Structures & Algorithms, User Experience Design, Mobile Development, Probability, Scalable Systems, Data Science, Linear Algebra, Multivariable Calculus, Computer Science, Discrete, Data Mining, Human Centered Design, Advanced Design Tools, Big Data, Algorithmic Art, Advanced Capstone in Data Science

Thesis: Explore and build swarm algorithms that visualize music and audio inputs into dynamic animated art through Processing. Recommended and published to Journal of Humanistic Mathematics and Scripps Senior Theses in 2025.

Extracurriculars: IT Intern, Hall Tech, Bee Lab Research Assistant, Data Science TA, Math Tutor, Club Volleyball Captain, Women of Computing Machinery Club, 5Cs Hackathon, LA Hacks 2023, P-Artificial Intelligence Club, Girls Who Code Leadership Academy

ADDITIONAL INFORMATION

- **Technical Skills**: Python, R, SQL, Github, LaTeX, Unix, Excel, Machine Learning, Web Dev, C++, Javascript, HTML, CSS, AI/ML, NLP, Typescript, UI/UX, Figma, PyTorch, TensorFlow, OpenCV, Kotlin, Jetpack Compose, OpenSCAD, Laser Cutting, 3D printing
- Personal Projects:
 - App that generates a Spotify playlist based on an image by training a convolutional neural network computer vision machine learning model with PyTorch and using Spotify's APIs.
 - Full stack mobile app with Kotlin and Jetpack Compose to track, log, and see information about TV shows
 - o Full stack weather app in Android Studio with API calls and map functionality to see live weather updates globally
 - o Hand controlled music audio visualizer with computer vision machine learning hand tracking and TouchDesigner
 - o Full stack tool that allows users to draw and project tattoos onto a 3D model, designed with Figma; built with React JS
- Participated in **Intuit x CMC IdeaJam 2023**. created, designed, and pitched an accessible dashboard with insights, machine learning models, and a trend tracker to help small businesses acquire customers with better marketing tools
- Selected into **Cornell's Break Through Tech AI**. Spent summer 2023 learning about machine learning through hands-on labs and Fall 2023 work in teams to tackle real-world challenges from Accenture/Google.
- Selected & Participated in **Capital One's Tech Mini-Mester 2022**. Developed a chatbot, built a NFT collection, completed workshops on Cloud Computing/Amazon Web Services, GitHub, cyber secure Coding.
- **Research paper coauthor**: "PM2.5 Forecasting Using Machine Learning: Opportunities and Obstacles Across US Landscapes" for 2023 American Geophysical Union Conference, contributed to data analysis and model development