

Yifang(Michael) Chen

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EDUCATION

Bachelor of Science in Computer Science, New York University Tandon School of Engineering 01/2021-12/2024

- GPA: 3.57/ 4.0
- Minor in Game Engineering and Math

PROFESSIONAL EXPERIENCE

Java Development Intern, Google Shanghai, Remote 12/2022-02/2023

- Set up development environment and gained proficiency in Java Spring, Springboot, and Cloud technologies.
- Gained hands-on experience with MyBatis3 database and developed a basic login interface with token validation.
- Wrote code for frontend development of several small-scale programs and debugged existing code.

Software Developer, Smart Wearable Bio-Tracker for TeleRehab and TeleMonitoring, NYU, Brooklyn 01/2023-05/2023

- Collaborated in a multidisciplinary team on an innovative project aiming to develop a wearable device for detecting muscle contractions and predicting hand gestures.
- Utilized Python Flask for backend development, handling the integration of complex machine learning models built with TensorFlow and PyTorch.
- Programmed a system that transmitted real-time data and model predictions to a frontend developed in ReactJS, ensuring smooth user experience and accurate gesture tracking.
- Applied CSS techniques to the frontend display to align with the UI design created in Figma, and optimized responsive design with media queries in the hamburger menu.
- Worked on the functionality of the prediction and transmission buttons, leveraging ReactJS to handle data and component state.
- Showcased the practical applications of the wearable by creating a Unity game for the project's final presentation. The game was controlled entirely by user gestures detected by the wearable device, demonstrating its potential for interactive applications.

RESEARCH EXPERIENCES

Summer Research Intern under Professor Shlomo Ta'asan, Carnegie Mellon University 06/2023-Present

- Conducted in-depth research in the field of AI under the mentorship of Professor Ta'asan. Studied various aspects of AI including Supervised and Unsupervised Machine Learning, Deep Learning, Neural Networks, and Computer Vision.
- Led the 'Dinosaur Recognizer' project, an ambitious endeavor aiming to identify dinosaurs from an image at various taxonomic levels.
- Designed a multi-tier identification model, where each stage aims to narrow down the dinosaur's classification from a broad category (e.g., dinosaur or not) to a specific type (e.g., T.Rex).
- Gathered data from "dinosaurpictures.org" using Python for web scraping. Utilized BeautifulSoup and Selenium to scrape approximately 4000 images.
- Conducted manual categorization of images based on descriptions, distinguishing dinosaur images from non-dinosaurs.
- Structured the image dataset into training, validation, and testing sets to train the identification model, with a goal to publish a research paper detailing the project findings and methodology.

PROJECTS AND COURSEWORK

Game Development Course, NYU, Student Game Developer 01/2023-05/2023

- Embarked on an intense game development course that required designing, developing, and publishing a new game every two weeks. This rigorous timeline honed my ability to work under pressure while maintaining creativity and technical precision.
- Created a variety of Unity 2D and 3D games over a semester-long course, published on itch.io.
- Developed an iOS tower defense game, "Animal Defense," as the final project.
- Gained significant collaboration experience and proficiency in version control using GitHub.

SKILLS

Language Skills: Native Mandarin, Proficient in English, Some Literacy in Spanish

Programming Languages: C/C++, Python, Java, HTML5/CSS/JavaScript, React.js, Swift, x86 Assembly Language

Technologies: Unity 2D/3D, Spring, SpringBoot, MyBatis, SQL

Tools: Microsoft Word, Excel, PowerPoint

Other: Game Development, Web Scraping, Machine Learning, Deep Learning

