Juana Wong

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EDUCATION

The City College of New York, CUNY — **New York, NY**
B.S. Computer Science, Mathematics Minor, Psychology Minor — *Expected Class of 2025*

- Cum GPA: 3.27 / 4.0
- Honors & Awards: Dean's List Spring 2021, Dean's List Spring 2022
- Current Coursework: Introduction to Data Science, Introduction to Machine Learning, Database Systems, Senior Project I

TECHNICAL SKILLS

C++, **Python**, **HTML**, **CSS**, **JavaScript** (React), **SQL** (PostgreSQL), **Google Workspace**, **Microsoft Office**, **Power BI**

EXPERIENCE

Federal Work-Study (FWS) - The Lohman Laboratory, The City College of New York — **New York, NY**
Web Designer / Software Developer - Butterfly Mimicry Database — November 2024 – *present*

- Supervisor: David J. Lohman
- Technologies: **Figma**, **TypeScript**, **JavaScript**, **React**, **Next.js**, **Tailwind CSS**, **PostgreSQL**, **Prisma ORM**, **NextAuth**.
- Designed and developed a web application for academic professionals alongside one other team member to host, filter, create, insert, and manage (CRUD) comprehensive taxonomic and geographic data on butterfly mimicry for over 19,000 species, supporting professional classification and research workflows.

PROJECTS

Butterfly Species Classification Using Transfer Learning with ResNet50 — Final Report 🔗 Github Repository
Final Project for (CSc 447) Introduction to Machine Learning — Spring 2025

- Built and trained a **CNN** using **PyTorch** and **Torchvision** to classify 9,000+ butterfly images across 75 species, applying transfer learning with the **ResNet50** model to boost accuracy and reduce overfitting.
- Preprocessed and augmented large-scale image datasets with **NumPy**, **Pandas**, and **Pillow**, optimizing data pipelines in **Jupyter Notebooks** for efficient training and evaluation.
- Monitored model training progress with **TQDM** and visualized performance metrics and analytics using **Matplotlib** and **Seaborn** for actionable insights.

AlgeBlitz — Agile Sprint Retrospective 🔗 Github Repository
Final Group Project for (CSc 456) Topics in Software Engineering — Fall 2024

- Developed a maths-based **React Native Expo** mobile app with five teammates using the Agile methodology and Trello.
- Designed and prototyped each screen in **Figma** for diverse use cases, and implemented frontend components using **TypeScript**, **JavaScript**, **Tamagui**, and **Tailwind CSS**.
- Created and automated UI, heartbeat, unit, and integration tests for the Expo app using **Jest** and the **React Native Testing Library**, maintaining reusable, reliable, and quality-assured functions and components.

MANJU Restaurant Management System — Software Requirements Specification 🔗 Github Repository
Final Group Project for (CSc 322) Software Engineering — Spring 2024

- Developed a mobile app for a restaurant's food order and delivery system with a team of four using **Dart** & **Flutter**.
- Served in system design, development, and documentation, ensuring seamless integration and use-case viability.
- Implemented user-specific functionalities for admin and chef roles, ensuring data integrity across the platform.
- Designed and maintained the **Firestore Database** architecture for customer orders, menu listings, ratings and reviews, ingredient inventory, customer records, and staff listings.