## IAN CHEN

ianychen@stanford.edu • 469-642-6747

### **EDUCATION**

Stanford University Jun 2026

Bachelor of Science, Major: Computer Science

GPA: 4.07

Relevant Coursework: AI Principles, Computer Architecture, Algorithms, Probability, Linear Algebra, Multivariable Calculus

Plano West Senior High School

Jun 2023

Valedictorian (1/1329) SAT: 1590 (800 Math / 790 Reading)

GPA: 4.87

Awards: IEEE SOSE Conference Presenter; USA Junior Math Olympiad Qualifier; USA Computing Olympiad Gold Division

## **EXPERIENCE**

IBM Jun 2024 – Present

Software Developer Intern

- Acted as project leader for intern team; held team meetings and coordinated progress on project tasks
- Developed Python program using watsonx LLMs and LangChain to generate budget proposal documents based on meeting notes
- Utilized Milvus vector database for resource augmented generation (RAG) framework resulting in 70% time saved for IBM

Venture Shares Nov 2023 – Jun 2024

Backend Developer Intern

- Designed, developed, and tested the company database using TypeScript, Sequelize, Node.js, and Jest
- Coded Python model using web scrapers to generate volatility scores of financial news and feed cleaned data into database

### **ArcGen Technologies**

Mar 2023 - Aug 2023

Instructor and Teaching Assistant for Machine Learning

- Taught weekly lectures and in-class labs for over 100 students; answered questions and gave feedback on graded assignments
- Topics include neural networks, large language models, and image classification using MIT App Inventor and DALL-E API

Ericsson Jun 2021 – Jul 2021

IT Summer Intern in the BSS Solution Department

• Developed a CI/CD project linking the Jira Dashboard and GitLab using the deployment of testing scripts to improve the efficiency of product testing; collaborated with a team of 10 developers using Agile methodology

### **PROJECTS**

flipIt Feb 2024

- TreeHacks 2024 submission; used Arduino Cloud to control smart light switch through a mobile app remotely
- Created a wall-attachable prototype using an ultrasonic sensor, servo motor, and ESP32 microcontroller

## Automatic Generation of Graphic Designs with Aesthetic Measurements

Mar 2020 – May 2023

- Authored research paper based on automatic graphics generation system implemented using Processing 3 and MATLAB
- Analyzed aesthetic quality through Fourier spectral slope statistics to assist graphic designers' productivity

# Combining Perception Considerations with Artificial Intelligence in Maritime Detection Systems June 2015

Jun 2021 – Jun 2022

- First author of published paper *Perception Considerations with Artificial Intelligence in Maritime Threat Detection Systems* at the 2022 IEEE System of Systems Engineering (SOSE) Conference, detailing a boat movement classification model
- Trained a Python AI entropy-based detection algorithm based on Markov models using C++ synthesized data

## Arch A-Eye

Jun 2020 – Mar 2021

- Architectural image classification app that provides interactive experiences for users using Python scikit-learn neural network
- Used Android App Studio to complete the app interface; published on Google Play Store

### **ACTIVITIES**

# **Business Association of Stanford Entrepreneurial Students (BASES)**

Sept 2023 – Present

Director of Challenge

- Participated in Frosh Battalion program, including entrepreneurial skill-building workshops and a business pitch competition
- Helped connect industry mentors with 100+ students through weekly meetings as former member of the Hackspace team

### Association for Computing Machinery (ACM)

Sept 2023 – Present

Member

- Used PyTorch library to create a bird image classification model using convolutional neural networks
- Published paper in SemEval 2024 Task 8 research project using Python to classify machine versus human-generated text

#### SKILLS

• Technical: C++, Python, C, PyTorch, scikit-learn, MATLAB, JavaScript, Git, Assembly, TypeScript, Node.js, Unix, Arduino