Emily Zhang

emily49@stanford.edu | 970-999-2198 | linkedin.com/in/emilyszhang | https://github.com/49emily

EDUCATION

Stanford University — Stanford, CA
*B.S. in **Computer Science (AI Concentration)** & B.A. in **Art Practice*** | GPA: 4.10/4.00 — Class of 2026

- Relevant Coursework: Programming Abstractions (CS106B), Computer Organization & Systems (CS107), Blockchain Foundations (EE374), Modern Mathematics: Discrete Methods (MATH 61DM), Linear Algebra, Real & Complex Analysis, Design Sketching (ME 110)

Cherry Creek High School — Greenwood Village, CO
GPA Weighted: 4.8 | Unweighted: 4.0 | SAT: 1600 | AMC 12: 118.5 — Aug. 2018 – May 2022

- Relevant Coursework: AP Computer Science A (5), AP Calculus BC (5), AP Drawing (5), Data Structures & Algorithms, iOS App Development, Calculus 3/Differential Equations

RELEVANT EXPERIENCE

Stanford Carta, *https://carta-beta.stanford.edu/* — Stanford, CA
Front-end Developer — Dec. 2022 – Current

- Leading front-end React.js rebuild and redesign of Carta's newest iteration
- Carta is Stanford's student-run course exploration and planning site used by 95% of the student population

AquaRealTime, *Algae-Tracking Environmental Technology Startup* — Boulder, CO
Software Development Intern — Jul. 2022 – Sep. 2022

- Developed graph annotation feature in Vue.js for algae tracker users to log, view, and track weather and treatment events against phycocyanin and chlorophyll-a values
- Built an ML algorithm with principal component regression and multivariate regression that predicts effects of buoy temperature, water temperature, and light on PC/CA levels, allowing more accurate algae detection

Machine Learning Researcher — Jul. 2020 – May 2021
Project Title: "Fusing LiDAR and Camera Data for Advanced Context Recognition in Autonomous Navigation Sensory Systems through Multidimensional Deep Neural Network Architectures"

- Created novel Python LiDAR/Camera sensor fusion system that uses VoxelNet and visual-CNN in performing more robust object detection and classification of street objects on KITTI autonomous driving dataset
- The architecture reached average precision of 93.62, significantly outperforming previous metrics
- Wrote research paper in LaTeX and presented at Regeneron International Science & Engineering Fair (ISEF)

LEADERSHIP EXPERIENCE

Stanford ASES, *Stanford's Global Entrepreneurship Society* — Stanford, CA
Bootcamp Fellow — Sep. 2022 – Current

- Selected as 1 of 40 Fellows out of 200+ Stanford students for ASES Bootcamp
- Attending entrepreneurship workshops and speaker series with VCs and founders to develop a minimally viable product and pitch with a team of other members

Ross Mathematics Program, *Proof-based Summer Math Camp* — Columbus, OH
Junior Counselor — Jun. 2021 – Aug. 2021

- Attended 2020 Ross Math Program and returned as a Junior Counselor for summer 2021
- Taught students number theory, graded problem sets, lectured on integer partitions, and led problem seminars

AWARDS & ACCOLADES

- MIT Math Prize for Girls & AIME Qualifier
- Regeneron ISEF Finalist & Special Award Winner
- 2022 Congressional Art Competition Winner, Winning Piece at U.S. Capitol until July 2023
- USA Computing Olympiad Gold Qualifier
- 4x National Scholastic Art Medalist; Exhibited at Denver Art Museum, Parsons School, Carnegie Hall (Art Portfolio)

SKILLS

Software: Jupyter, VSCode, Overleaf, Google Colab, Xcode, Eclipse, Excel, Procreate, Adobe Illustrator, Figma
Coding Languages & Frameworks: Java, Python, C++, JavaScript, HTML/CSS, Vue.js, React.js, LaTeX
Natural Languages: Mandarin Chinese (Bilingual proficiency)