Chenxi Xue

Undergraduate Student in Applied Mathematics
University of California, Santa Barbara
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Education

University of California, Santa Barbara

 ${\bf B.S.\ in\ Applied\ Mathematics-- Second-Year\ Undergraduate}$

GPA: 4.00/4.00

Dean's Honors (L&S): Winter 2025

Expected June 2028

Relevant Coursework

- Linear Algebra
- Elementary Analysis
- Calculus
- Python Course Based on Physics

Projects and Research Experience

Introduction to Machine Learning and AI Workshop

Supervised by Prof. Vipul Goyal (Carnegie Mellon University)

Summer 2023

- Participated in a 7-week academic workshop introducing machine learning and AI fundamentals, including basic linear/logistic regression, neural networks, SVMs, and K-means clustering.
- Completed 6 mentor-led case study sessions.
- Conducted a team-based final project on analyzing price of housing by basic machine learning; individually delivered a 10-minute oral presentation.
- Wrote a team-based 4 pages paper based on the application of AI on medical science.
- Gained exposure to core concepts in data privacy, cryptographic techniques in ML, and ethics in AI.

Internship at Nikuman Co., Ltd. (Tokyo)

Summer 2025

• From June to July 2025, I completed a remote graphic design internship with Nikuman Co., Ltd., a creative studio based in Tokyo, Japan. My work focused on creating character illustrations and supporting the visual storytelling of various projects. This experience allowed me to collaborate effectively across time zones, enhance my illustration skills, and contribute meaningfully to a professional design team from afar.

Internship at Natus (Changzhou) Co., Ltd. China

Summer 2025

- From July 1st to July 31st.
- Verified and cross-checked technical and operational data for accuracy and consistency across internal systems.
- Assisted the information management team with data maintenance and digital organization tasks.
- Gained exposure to quality assurance processes within a Sino-German joint venture context.

Research Interests

Optimal Transport, Partial Differential Equations, Convex Optimization, Functional Analysis

Personal Interests

Digital Art, Game Design

Skills

- **Programming:** Python , Java, Html(Javascript, css), C#
- Tools: LaTeX
- Languages: English (Fluent), Mandarin Chinese (Native)

Additional Information

Currently seeking undergraduate book or paper reading program, and research opportunities in applied mathematics and analysis. Open to volunteer RA positions.