

Asya Lyubavina

Del Mar, CA, 92014 | (858) 284-9456 | alku2022@mymail.pomona.edu | <https://www.linkedin.com/in/asya-lyubavina-058155271/>

EDUCATION

Pomona College | Claremont, CA | B.A. | Double Major in Computer Science and Chinese | **GPA: 3.58**

May 2026

Relevant Courses: Data Structures and Advanced Programming, Intro to Computer Science with Topics in AI

SKILLS

Proficient Technologies: Java, Python, Heroku, Haskell, Git, React, Flask, JavaScript, HTML/CSS, ChatGPT API, Google Suite API

Libraries: OpenCV, numpy, matplotlib, google colab, scikit-image

Languages: English (fluent), Russian (fluent), Chinese (advanced), French (intermediate)

TECHNICAL WORK EXPERIENCE

Doodle Lab Research Assistant, Pomona College | Claremont, CA

May 2024 to Present

- Worked with Stanford University PhD student Jiaju Ma and Professor Jingyi Li in a cross-university collaboration to create a web application designed to help novice artists develop transferable drawing skills and improve artistic intuition
 - Unlike existing Creativity Support Tools, that don't focus on transferable skill acquisition, this application is targeting to boost learning retention by 50% and drawing accuracy by 70%, by effectively solving this niche problem
- Streamlined image processing workflows, improving visualization guidelines to enhance user learning by providing multi-layered visual analysis of a given reference image, thus reducing the initial learning curve of transferable drawing skills
- Developed a Python script on Google Collab by using OpenCV library's Canny Edge Detection algorithm for the deduction of leading lines and Scikit-image library's SLIC algorithm for shape breakdown in order to automate the extraction and representation of compositional elements from images that the user selects for reference
- Conducted extensive research on Creativity Support Tools, Image Processing, and Cognitive Science, leading data-driven discussions that shaped project direction and influenced key decisions, such as those regarding methodology, by using research-backed data to optimize functionality and ensure effective learning outcomes

Hirsch Grant Research Assistant, Pomona College | Claremont, CA

June 2023 to January 2024

- Initiated an improvement for Pomona's foreign language professors by developing prototypes in Python and Javascript for an application that automates slides creation, thus reducing the time this process takes from 3-4 hours to less than 5 minutes, under the guidance of Professor Feng Xiao
 - Developed a chat-based interface, allowing users to input metadata and receive Google Slides presentations featuring definitions, translations, and use cases for vocabulary
- Spearheaded deployment of the application on Heroku using Flask, leveraging Google Drive and Google Slides APIs for seamless automation, placing the presentation-ready slide deck in their google drive
 - This solution has a minimal to no-cost operation for low volume and can be scaled to higher tiers based on usage
- Engaged in query engineering in both English and Chinese to refine ChatGPT API prompts, settling on the davinci-003 engine for final content generation through prototyping and experimentation
- The prototype for this project can be found here <https://github.com/asyalyu/PPTGPT>

Teaching Assistant for Computer Science, Pomona College | Claremont, CA

December 2023 to March 2024

- Mentored 35 students in the Discrete Math and Functional Programming course, one of the biggest classes in the CS Department, including weekly sessions with 6 students, leading to great improvement in comprehension and grades

ADDITIONAL EXPERIENCE

Lab Assistant, Foreign Languages Resource Center | Claremont, CA

December 2023 to Present

- Successfully managed operations supporting 4 academic departments, overseeing event scheduling, media indexing, and customer service with a focus on efficiency and user satisfaction

Writing Partner, The Center for Speaking, Writing, and the Image | Claremont, CA

May 2023 to January 2024

- Specialized in assisting first-year students with STEM writing-intensive courses, improving their writing skills and grades

AWARDS AND GRANTS

Summer Undergraduate Research Program Fellowship

May 2024 to August 2024

- Merit-based grant awarded for exceptional research potential, selected from a competitive pool of applicants
- More information about this fellowship at Pomona College for Summer 2024 is linked here <https://tinyurl.com/5n7mcfdc>

Hirsch Grant Research Assistant

June 2023 to January 2024

- Recognized for initiative in designing an innovative application for foreign language teachers

EXTRACURRICULAR ACTIVITIES

Project Member, P-ai: Project AI | Pomona College

September 2024 to Present

- Responsible for developing and deploying an iOS mobile application for Pomona College's Gym as part of the P-Gym project by using Swift on the back-end and Figma for planning the front-end design

Director of Design, P-ai: Project AI | Pomona College

January 2023 to March 2024

- Led the design and marketing processes for the Computer Science club, the biggest pre-professional club of the Claremont Colleges, by building a web presence and developing a unique brand