

# VIENNA GAO

3096 McClintock Avenue, Los Angeles, CA, 90089 • (415) 717-8184 • vgao@usc.edu

## Summary

Multidisciplinary and multimedia college student. A scientist, an athlete, and a musician. I collect skills and insights from a variety of experiences, which makes me a more adaptable, detail-oriented, and dogged scholar.

## Skills

- Image analysis (Cell detection; QuPath)
- Immunohistochemistry
- Sample storage
- Behavioral data analysis (excel)
- Problem resolution
- Process improvement
- Planning and coordination
- Project organization
- Documentation and reporting
- Marketing strategy
- Communications
- Process improvement
- Communications

## Education

### Neuroscience - Bachelor of Science - 2025

*University of Southern California - Los Angeles, CA*

- Intending to add a mathematics major
- Presidential scholar (half-tuition merit-based scholarship)

### High School Diploma - 2021

*The Nueva School - San Mateo, CA*

## Experience

### Marketing and Communications Intern - June, 2020 to July, 2021

*Parker Institute for Cancer Immunotherapy - San Francisco, CA*

- Communication: Wrote a daily news email distributed to thousands of members of the PICI network, published 2-3 social media posts per week, and proofread and edited press releases.
- Research/Data Analysis (Sprout Social): analyzed audience engagement and impressions, cross-referenced them with data from posts with significant attention, interpreted online behaviors of relevant institutions, used online educational resources to understand social media analytics
- Generating Solutions: Presented specific actions PICI's communications team could take, such as ways to harness features for optimal growth, after COVID had diverted significant audience attention for cancer treatment towards infectious diseases
- Writing: Wrote blog posts and wrote summaries of major PICI research papers for website
- Creative Media: used skills in iMovie, Adobe Illustrator, photoshop, Adobe spark to create visual content for PICI's social media platforms (Twitter, Instagram, Facebook, LinkedIn)

### Founder and Leader of Neuroscience Club - August, 2020 to June, 2021

*The Nueva School - San Mateo, CA*

- Networking: established connections with scientists/thought-leaders from various institutions, arranged virtual webinars weekly for a guest speaker to teach high school students about either their research in neuroscience or a topic of interest to the speaker
- Presenters: Post-doctorate researcher(s) from Harvard Medical School (1) and the University of Chicago (2). Professor/PI and recent graduate from Stanford University (2). Jazz musician/PhD from Northwestern University (1).
- Outreach: Grew membership from 0 to 46 students

### Founder and Leader of LiMPETS Club - May, 2019 to June, 2020

*The Nueva School - San Mateo, CA*

- LiMPETS (organization) monitors the coastal ecosystems of California/helps youth develop a scientific understanding of the ocean/aims to provide long-term data to inform marine resource management and the scientific community.
- Leadership: Arranged weekly meetings to go over logistics related to coastal monitoring events (i.e. field trips led by members of the LiMPETS organization) and data collection
- Methods used (also found on website): practiced vertical transect, random quadrants in a permanent area, total counts in a permanent area, size measurements in a permanent area

### Independent Study: Music Cognition - August, 2019 to Present

*The Nueva School - San Mateo, CA*

- Writing: (Fall 2019), wrote a broad review of music cognition scientific literature, the goal was to establish a solid understanding of what niches of the field have more/less research
- Thinking: (Spring 2020) wrote a literature review titled "Does Interacting with Classical Music Change the Brain?" (researched a diverse repertoire of papers, in terms of experimental methods)
- More thinking: (Spring 2020) final project: a research proposal titled "A New Way to Look at Jazz Improvisation: Brain-to-Brain Coupling" (explained core definitions, final research question: "What does this non-verbal communication and coordination look like in the brain, given that music is a complex form of expression and serves an undefined explicit evolutionary purpose?")
- More thinking: (Fall 2020) third literature review titled "How an Individual Relationships to Music Differ: The Functional Genomics, Epigenetics, Neuroplasticity of Music Cognition and Musicality"
- Interdisciplinary: (Spring 2021) investigated applications of linear algebra in fMRI data analysis (presented relevance of the general linear model in my linear algebra course)

### Team Member and Studio Management Lead for Invention Studio - January, 2018 to June, 2020

*The Nueva School - San Mateo, CA*

- Studio management lead (August 2019-May 2020): Led a group of students in optimizing the budgetary, branding, and funding needs of Invention Studio; led weekly meetings to discuss the implementation of the non-logistical requirements of Invention Studio for important events (i.e., Design Review, Demo Day, etc.)
- Team member for Modwello (2017-2018) and Marketing/outreach lead for team SafeBlock (2018-2020): initiatives to design an affordable, safe, convenient homeless shelter pod; iLab experience, gauged design input from the target need group and presented at the Stanford d.school in May 2018 for Invention Studio's Demo Day
- Skills practiced: power saws and other woodworking skills, designing user-need statements, prototyping, presentation, grant-application

# Extracurriculars

## Long Distance Running (Sport)

### Varsity Cross Country and Track and Field at The Nueva School

- Elected team captain in 12th grade; lead workouts, lead cool-down sessions, and communicated with coaches about logistics
- Competed in regular meets and races in the Private School Athletic League (PSAL), the California Interscholastic Federation (CIF) State Cross Country Race in November 2018, and the Nike Cross Country Invitational in Portland, Oregon (October 2019)
- Awarded varsity 2nd team all-league (PSAL) in 2018 Qualified for the Boston Marathon by 6 minutes (3:23:59) at the Los Angeles Marathon (placed first for my division, 31st female)
- First in my division at Long Beach Half-Marathon (1:35:03)

## Piano and Clarinet Performance (Art)

### Graduation Diploma from San Francisco Conservatory of Music (Pre-College Division)

- Learning: Attended weekly Saturday classes: musicianship; theory and auditory skills, choir, chamber group, Women Composers in History course, and Jazz Lab course from 9:00am to 5:00pm
- Instrumentation: Perform throughout the year solo and with chamber music groups