# **Eric Yang**

Based in Los Angeles, California ericyang26@g.ucla.edu | (310) 461-5746 | Portfolio | Github | LinkedIn

### **EDUCATION**

### University of California, Los Angeles

Los Angeles, CA

Bachelor of Science in Computational and Systems Biology, Departmental Honors

2020-2024

Concentration: Biological Data Sciences

2022-2024

# University of California, San Francisco

San Francisco, CA

Master of Science in Health Data Science

2024-Present

### **INTERNSHIP**

PITTAN Inc. Kobe, Japan

Chief Technology Officer

Jun. 2023 - Sep. 2023

Develop a folder of python csv to supplement a raspberry pi gen 4 compatible logistical system working to analyze amino acid chromatography from commercial sample sweat swabs. Lead 1 team project using neural networks to infer possible diseases and give score metrics to skin according to amino acid, fat, moisture value, and skin age approximation. Lead another team project to complete the PITTAN app using java for aesthetic representation from the machine learning data and successfully established in the App Store. Assisted in application security.

### RESEARCH

### Design a Skin Analysis Alternative Using Sweat Amino Acid Content

**Undergraduate Thesis** 

Analyze sweat amino acid content to predict skin health through scoring six criteria: moisturizing ability, firmness index, blemish prevention, saggy prevention, power of resilience, and stress prevention in amino acid categorization. Used machine learning to test accuracy and predict sweat models to more accurate hospital skin biopsy analysis. Weigh costs and benefits between price and accuracy between two methods through trial testing at Kobe University with a sample size of 500.

### SARS-CoV-2 Patient Lungs Effect on Lung Cancer

Dec. 2023 - Present

Set up trial design at UCLA Ronald Reagan hospital, acquire patient data, analyze genetic samples through machine learning and quantify qualitative data using convolutional neural networks. Using classification to divide into levels by lung images. Estimated project to be long term.

## **PROJECTS**

# **EEG Analysis in PTSD Patients**

Mar. 2023 - Jun. 2024

**Suthana Lab** 

Arisaka Lab

Santa Monica, CA

Used MATLAB for neural signal processing over 1000 patient EEG data and created charts, pie-charts, pareto charts, and graphs. Assisted in creating 2 efficient MATLAB files for AI analysis and machine learning methods. Assisted in designing one clinical trial, drafted consent documents, shadowing with professors and giving directions to patients.

# Neuro Vella VR Audio Therapy on Patients With Depression

Aug. 2022 - Feb. 2023

**Institute of Neuro Innovation** 

Santa Monica, CA

Assist conducted clinical trials over 500 active patients, designed and experimented 3 sound wavefronts audio therapy files. Analyzed 500 patients signal processing data using poisson distribution and machine learning algorithms. Successfully divide patients into three categories of effectiveness.

# **Cerebral Cortex Signal Processing and Bioimaging in Primates**

Sep. 2021 - Jun. 2022

**UCLA** 

Assisted design 1 algorithms csv file for bioimaging and linear transformations. Research and provide information brain and drug neural pathways, stimulus and response, and give and reward systems and propose potential simulations in python.

### **COURSE EXPERIENCE**

Algorithms	Spring 2024
Biological Modeling: Mathematical and Computational Approaches	<b>Spring 202</b> 4
Learning in Biological and Artificial Neural Networks	Winter 2024
Principles of Epidemiology	Winter 2024
Machine Learning Applications in Genetics	Fall 2023
Computational Neuroscience for Interdisciplinary Scientists	Spring 2023
Introduction to Biostatistics	Spring 2023

#### LEADERSHIP & INVOLVEMENTS

### Bruinlife, UCLA Student Media

Los Angeles, CA

Illustrations Editor Sep. 2022 - Jun. 2024

Oversees the organization's artworks and 12 member staff within the section, produces one artwork from each staff every week according to suitable themes, involves in the UCLA year book and layout illustration with other divisions. Design with Adobe Suite, Procreate, Ibis Paint X.

# **Taiwanese Culture Night**

Los Angeles, CA

Front Stage Co-Director, Advisor

Jun. 2022 - Jun. 2024

Wrote a script for 50 cast members, performed at UCLA Royce Hall. Raised 30k funds for Royce Hall rental from SPARK campaign, Go-fund me and Chinese school sponsorships. Four fundraisers on campus and outreach emails to potential donors. Lighting and sound allocation during the show.

### Anime Geijutsu Art and Music Club

Los Angeles, CA

Co-founder & Arts Director

Sep. 2023 - Jun. 2024

First club at UCLA dedicated to J-pop music and anime music art. Raised funds to rent Art Gallery space on campus and plan to hold an exhibition during Spring 2024 with a group of 8 artists.

### Tong Li Publishing Co.

Taipei, TW

Manga Editor & Translator

Jun. 2020 - Apr. 2024

Translate from Japanese to Mandarin over 20 manga books and novellas. Involved in Cover illustration and content polishment. Oversees the whole translating process and leads a team of 15.

### **Mega Financial Holding**

Songshan, TW

Assistant Accountant Internship

Sep. 2020 - Mar. 2021

Assisted quantify over 3000 documentations and money revenue, costs, and profit. Assisted company into over 5% profit in the division.

### **TOEFL and AP Calculus BC Tutor**

Self-Employed

Jun. 2019 - Jun. 2024

Tutored 6 highschool students and one college student in TOEFL and Calculus. Improved an average of 20 points in grade percentage and 25 points in TOEFL iBT. Successfully mentored them to reach top 10 universities in Taiwan and University of California Santa Barbara Graduate physics.

### **SKILLS & INTERESTS**

Programming: C++, Java, MATLAB, Python, R-Studio.

Suites: Microsoft Office (Word, Excel, Powerpoint, OneNote), Adobe (Audition, Illustrator, Lightroom, Premiere Pro).

Academics: Clinical Design, Data Analysis, Genetics, Introductory AI, Machine Learning, Problem Solving (Top 5% AIME Math Exam) Languages: Japanese (N2), Mandarin (native). Interests: Percussion(15 yrs.), Photography, Table Tennis (Top 3 HS Div.), Dig. Illustration.