

Jung Tzen Liew

jungtzen@gmail.com | 347-456-0745 | [linkedin.com/in/jung-tzen-liew](https://www.linkedin.com/in/jung-tzen-liew)

SKILLS

Bioinformatics

- samtools
- scanpy
- bcftools
- plink
- BWA
- sickle
- GWAS
- NGS Data Structure Analysis
- Genomic Technologies
- Variant Analysis

Software Development

- Python
- C++
- Java
- R
- Unix
- Bash/Shell
- AWS
- MySQL
- Tableau
- MongoDB
- HTML
- MATLAB
- git Version Control
- Advanced Data Structures
- Memory Managing
- Object-Oriented Programming
- Statistical Analysis
- scrum & agile methodologies

Other

- Project Management / Development
- Microsoft Office Suite
- Chinese
- Spanish

Soft Skills

- Strong Communication Skills
- Collaborative
- Adaptable
- Problem-solving
- Creative

EXPERIENCE

Bioinformatics Researcher at The Simonson Lab

Sept 2023- Present

- Creating visualization and conclusions through genomic, proteomic, transcriptomic, and metabolomic analysis in Python, R, and Bash to identify key factors influencing hypoxia adaptation
- Employing an integrative physiological genomics approach to study variations of human adaptation to high-altitude living, focusing on populations in the Tibetan Plateau, Andes, and Ethiopian highlands

Bioinformatics Researcher at The Ghosh Lab and The Boolean Lab (HUMANOID CoRE)

Jan 2021 - Present

- Pre-processing data and aligning human and mouse genomic data using machine learning model analysis gathered from experiments regarding Inflammatory Bowel Disorder (IBD) and Atherosclerosis
- Identifying and predicting 15+ target genes using boolean analysis to be tested in therapeutics for IBD
- Updating a dynamic database of 1000+ processed genomic data
- Creating 100+ visualizations for large scale data using R, Python, Bash, matplotlib, and pandas
- Performed wet lab and in vivo experiments to study how Circadian Rhythm influences expression of G-protein and Inflammatory Bowel Disorder

Industry Relations Chair at UCSD Undergraduate Bioinformatics Club (UBIC)

Jun 2023- Present

- Facilitating events for students to develop their bioinformatic career path
- Connecting students to a diverse group of professionals in the field
- Serving as a resource to help students get into industry

Financial Data Analyst at UCSD Recreation

Nov 2022 - June 2023

- Manipulated financial data to create 5+ visualizations using Jupyter Notebook, Tableau, Python, and Excel
- Processed 1000+ student/faculty data to retrieve information used to influence campus-wide decisions regarding UCSD Recreation operations
- Proposed new ways to visualize data more effectively

Software Development Manager at NotumNB (notumnb.com)

May 2022 - April 2023

- Worked closely with company founders to plan and implement app development in the context of the company's business plan
- Designed and executed several app development strategies using AWS servers & relational databases, mongoDB, WordPress, Tableau, a multitude of third party APIs, and git version control
- Regularly reported to company leadership for status updates and contribute to the overall strategy of the business

EDUCATION

B.S. Major in Bioinformatics, Minor in Computer Science
University of California, San Diego (UCSD)

(Year of Graduation: 2024)

- UCSD Department of Biology BioScholar
- Social Media Manager & Event Coordinator for HMP3 (Health and Medical Professions Preparation Program)

REFERENCES

contact information provided upon request

Pradipta Ghosh, MD - Professor
(HUMANOID CoRE, Ghosh Lab, Institute for Network Medicine)

Rama Pranadinata - Chief Executive Officer at NotumNB

Saptarshi Sinha, PhD - Post-Doctoral Researcher
Computational Biology (Mentor at Ghosh Lab)