

JIANG, YI-CHONG (TERRA)

(626) 848-3820 || terrajiang1@gmail.com || Glendale, AZ ||

<https://www.linkedin.com/in/yi-chong-jiang-276b97229>

SKILLS:

Programming Languages: SQL, Python, R, C++, JavaScript, MATLAB, HTML, PHP, CSS

Strengths: Problem-solving, Responsible, Attention to detail, Cooperative, Motivated, Eager to learn

Language: Fluent in English, Fluent in Mandarin, Conversational Taiwanese

WORK EXPERIENCES:

Metrology Process Engineer Sep. 2023 – Current *Taiwan Semiconductor Manufacturing Company, Phoenix*

- Carefully adjusted parameters on our tools to measure the length of features on the chips down to nanometers
- Excelled in a competitive and fast working environment meeting all required deadlines for the projects I managed
- Organized data using Excel and SQL into condensed and precise tables to increase readability and efficiency
- Generated reports including critical information regarding the tools I managed with a selection of parameters
- Optimized yield by reporting the performance of manufacturing tools from multiple charts and tables
- Possessed sharp data insight in order to understand the manufacturing progress within a small amount of time
- Suggested operational ideas after reviewing data performances to come up with the best solution with the team
- Took feedback from other departments and responded by revising the measuring methodology accordingly
- Effectively communicated between managers and coworkers in English and Mandarin.

Student Assistant (Math Tutor) Oct. 2019 - June 2021 *Mt. San Antonio College, Walnut*

- Worked as a one-on-one tutor with bonded college tutees who had appointments with me once or twice every week throughout the semester
- Communicated with coworkers and the supervisor for multiple approaches to solving problems
- Taught roughly 20 individuals during the period

PROJECTS INVOLVED:

Mesopredator Release Effect Winter 2023 *UCLA– Math Modeling*

- Used differential equations to simulate the interactions between the predator, the mesopredator, and the prey
- Identified the factors that result in distinctions of prey for certain ecosystems under assumptions
- Utilized Jacobian and nullcline techniques to identify equilibrium points and classify the corresponding stabilities
- Implemented heavy calculations to obtain phase portraits and time series under different assumptions
- Interpreted graph and chart information from the given models both mathematically and biologically

Facial Recognition Using Singular Value Decomposition (SVD) Spring 2023 *UCLA– Math Imaging*

- SVD: decomposition of input images into useful matrices with vital facial features in lower dimensions
- Constructed a system that enabled efficient comparison and identification from the input faces
- Used MATLAB to perform image transformations such as sharpening, blurring, darkening, and edge-detecting
- Reduced dimensions of facial image datasets to construct eigenfaces and recognize faces

Building Product Recommendation System Using GNN Spring 2023 *UCLA– Intro to Network*

- GNN (Graph Neural Network): deep learning of network, captures connectivity, predicts missing features
- Constructed a model to analyze the dataset of customers and products, and predicted recommendations of products to certain customers
- Used Python to perform data sampling, data cleaning, data visualization, and model construction
- Conducted feature extraction for the nodes from the network datasets and generated the homogenous graphs
- Executed graph convolutions to accurately embed average ratings to customer and product data points

EDUCATION:

University of California, Los Angeles, CA Sep. 2021 – June 2023 *Total GPA: 3.44/4.0*
Mathematics (major) *Major GPA: 3.51/4.0*
Program in Computing (specialization)

Mt. San Antonio College, Walnut, CA Aug. 2018 – June 2021 *Total GPA: 4.0/4.0*
Mathematics (major)