# Sheng (Tim) Chen

1704 Heavenly Bamboo Ct., San Jose CA 95131

Email: tic038@ucsd.edu Github Profile: https://timc1325.github.io/ Tel: +1 6572306683

#### **OBJECTIVE**

Interested in mathematical machine learning. Any mathematical tools that enables practical computational prowess fascinates me.

#### **EDUCATION**

University of California, San Diego

Ph.D. Electrical and Computer Engineering

**University of California, Los Angeles** 

M.S. Applied Statistics (GPA 4.00/4.00)

B.S. Mathematics (GPA 3.65/4.00)

University of California, Santa Barbara

Mathematical Science(GPA 3.91/4.00)

Aug. 2019 - Jun. 2020

Sep. 2020 - Jun. 2024

Sep. 2024 - Present

### **SKILLS**

Programming: Proficient in Python, R. Basic command in Java, C++, SQL.

Languages: Fluent in Mandarin. Basic command in Spanish.

# **Project**

# Five Major League Prediction, UCLA

Project Leader

Jan. 2023 - Mar. 2023

- Scraped soccer statistics website and sorted out the clean data frame format to work with for Pytorch
- Run and compare result from simple ML models (ie. XGBoost) and DL models (ie. CNN, Transformer)
- Fine-tuned hyperparameters using Experimental Design techniques to reach an accuracy of 36.7%
- Made changes on algorithms in functions to enhance the performance on the back end
- Lead the team develop front-end website for user input and demonstration

## Life Expectancy Prediction, UCLA

Project Leader

Oct. 2022 - Dec. 2022

- Collected and cleaned data from United Nations into desired format in R
- Lead the team work on exploratory data analysis, regression, cross-validation and variable selection
- Implemented methods including Linear Regression and Logistic Regression to make prediction
- Presented the project with visualizations and analytics.

#### **EXPERIENCE**

## Shanghai Youhui Education & Technology Company, Shanghai, China

Online Tutor

Oct. 2019 - Jun. 2020

- Taught high school juniors AP Calculus to improve their problem solving skills
- Reorganized test content and constructed a simplified map of the material
- Solved individual's issue of timing and significantly increased their speed of problem solving

# Heidelberg University, Heidelberg, Germany

Jul. 2018 - Aug. 2018

Intern, Assisted Researcher in IWR

- Created a game model with computational visualization skills, assisted by Professor Filip Sadlo
- Managed to simulate gravitational field, consolidated with game ideas using Python
- Presented final space game project to college professors in the field of STEM

#### **AWARD**

#### **AMC12: Achievement Roll and Honor Roll**

Feb. 2018 & Feb. 2019

• Scored top 5% on the American Mathematic Competition 12.

# **OHMIO Top 50**

Apr. 2017 & Apr. 2018

• Ranked 2.5% on the Ohio Council of Teachers of Mathematics State Competition.