# Shuyun (Jerry) Tang

### **Contact Information**

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#### **Education**

### Bachelor of Science, University of California Santa Barbara (UCSB)

September 2019 - June 2021

Major: Statistics and Data Science

GPA: 3.91/4.0 (UCSB Honor Student / Dean's Honor receiver)

Selected Expected and Past Coursework:

- Statistics and Data Science: Probability and Statistics; Bayesian Analysis; Regression Analysis; Design of Experiment; Machine Learning; Data Science Thesis; NLP; Deep Learning; Theoretical Computer Science, etc.
- Math: Vector Calculus, ODE, Linear Algebra, Number Theories, Numerical Analysis, etc.

### Exchange Researcher, Frontier Intelligence Lab, Osaka University, Japan

April 2021 - July 2021

Research candidate of Frontier Intelligence Lab, Osaka University. In the incoming spring semester, conduct independent research with the thesis of "Graph Neural Networks Application in the AI Robotics Visions" under Prof. Zhaojie Luo's supervision.

# **Professional Experience**

### Competition Expert, Kaggle

May 2020 - Present

Kaggle competition expert ranked **940**, out of 150000 users. Profile can be found at www.kaggle.com/tangshuyun/competitions Won 4 silver medals and 1 bronze medal in researched-based deep learning competitions:

- Cornell Bird Identification, Silver Medal (top 5%): Bird audio prediction, segmentation based on ResNets with Librosa/SED and custom post-process.
- Google Landmark Recognition, Silver medal (top 6%): Landmark images recognition based on EfficientNet with refined GeM pooling, ArcFace Margin loss.
- Halite By Two Sigma, Silver medal (top 2%): Al game agent development based on Reinforcement Learning (DQN) and ruled-base algorithms.
- Global Wheat Detection, Solo Bronze medal (top 7%): Wheat ears detection and feature extraction based on YoloV3 and ResNets with pseudo labeling, TTA, stacking. Solution Repository: github.com/44Shu/Kaggle-Solutions

### Project Manager, UCSB Data Science Club

September 2019 - Present

Working as the project "SSH Port 22 Hacker Passwords Pattern" manager. Responsible for organizing the team's workflow, utilizing K-mean, PCA, Hamming Distance, and custom data preprocess to analyze more than 40,000 passwords' patterns. Selected to present in the Annual UCSB Data Science Showcase.

Project Repository: github.com/44Shu/SSH-Hacker-Pattern-Recog

### Undergraduate Researcher, UCSB/Invoca

December 2020 - Present

Under Prof. Ruiz Trevor's supervision, conduct the research project 'Analyze Fraudulent JobPosting with NLP'. Analyze more than 18k job posts online and predict the fraudulence with contextual embedding models and classification models (BERT, LSTM). In the PSTAT197B research project 'Conversational Context Helper via NLP' sponsored by local company Invoca, we develop a product for feeding in sequences of sentences to support chat and call transcripts.

# Internship/Work Experience

### Learning Assistant, UCSB Statistics Department

October 2020 - Present

Undergraduate Learning Assistant assisted Dr. Dawn Holmes in **PSTAT10**: Principles of Data Science. Responsible for grading, preparing curriculum, the teaching of open labs, and office hours. Topics include data analysis in R and SQL. (8 hr/week)

## Research Assistant, UCSB Education Department

October 2020 - Present

Research Assistant in the Engineering Exploration by Prof. Danielle Harlow, which designs engineering curriculums. Responsible for processing and coding the interview data, surveys, teachers' audios. Further analyzed them with NLP methods. (5 hr/week)

# Test Engineer Intern, Pax Technology, Jacksonville, USA

March 2019 - May 2019

Responsible for testing 5 versions for the company's point-of-sale machines. Designed testing pipelines and procedures, analyzed the test data, including reviews, mock transactions, and generated reports. (35 hr/week)

### Financial Analyst Intern, Oriental Ginza Financial Holding, Shenzhen, China

June 2018 - July 2018

Financial analyst assistant summer internship. Responsible for analyzing supply chain data and departments' statistics using SQL and SAS. (40 hr/week)

### English Teacher, Spark Global Education, Remote

April 2018 - June 2018

Selected as the volunteer English teacher for the minority children in rural areas. Also created Oral English Curriculum targeting elementary school and junior high school students. (total 50 hr)

### Brand Designer, Original Throw, China/USA

July 2017 - Present

Established the yo-yo accessory brand Original Throw, developed more than 10 products, which are currently the best seller of yo-yo accessories in China. Exported to yo-yo shops and retailers in North America, Japan, Europe.

### **Skills**

**Programming Languages:** Python, C++, R, SQL, SAS, Julia.

Natural Language: Bilingual proficiency in English and Mandarin Chinese. Nearly fluent in Japanese (passed jlpt N3 test).

Libraries: PyTorch, Keras, TensorFlow, XGBoost, LightGBM, Numpy, Pandas, Scikit-learn, Seaborn, Altair.

Other hobbies: Professional sponsored competitive yo-yo player: ranked 8th in the world, 3rd in national, FL state champion.