# Jenny Kong

• Linkedin: jenshou • GitHub: jenshou

#### **EDUCATION**

M.S. in Data Science — University of San Francisco

July 2018 - June 2019

B.A. in Economics — National Taiwan University

September 2012 - June 2016

## **EXPERIENCE**

## Machine Learning Researcher — UCSF Neuroscience Center

November 2018 - PRESENT, San Francisco

- Multivariate Pattern Analysis Classified brain activities on 35 GB+ functional MRI data in Python. [Project Slides]
- **Visualization** Generated heat maps on brain scans to demonstrate stronger complex memory retrieval in young adults.
- End-to-end Automated Pipeline Created a custom Python module on PyMVPA, a Python library for fMRI data, and Scikit-learn.

## Data Scientist — MDF Instruments

August 2016 - June 2018, Los Angeles

- Growth Forecasting Developed a data-driven strategy to address overstock/ out of stock inventory issues. Predict future sales volume by scrapping Amazon Ranking data
- **Time Series Analysis** Revised sales forecast using SARIMA time series models which resulted in significant storage cost savings by reducing over-orders by 60k.
- A/B Testing Designed a complete A/B testing pipeline for marketing campaigns with full factorial designs.

## **PROJECTS**

## **Machine Learning**

- Recommendation System Built a recommendation system with TripAdvisor user data, reached MSE loss of 0.86 using collaborative filtering and Neural Nets in PyTorch.
- **Predicting In-App Purchase for Gaming App Users** Achieved an AUC score of 0.96 with XGBoost model and Bayesian Optimization.
- **NLP** Created an end-to-end pipeline to tokenize and encode text data with negative sampling for language models.

# **Experimental Design**

- **Community Randomization** Identified communities in Facebook ego-circles network data with networkX to avoid contamination.
- Reinforcement Learning Constructed softmax bandit and Bayesian Probability Matching Bandit strategies to optimize a slot machine simulator.

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#### **SKILLS**

- Area of Interest: Predictive Modeling, NLP, Recommendation System, Anomaly Detection, Neural Network, Hypothesis Testing, Bayesian Inference
- Languages: Python, R, Spark (PySpark, Spark SQL, Spark ML), PyTorch
- Database/ Tools: SQL (Postgres), NoSQL (MongoDB), AWS (S3, EMR, EC2, SageMaker), Plotly, Tableau

#### **AWARDS**

- Received scholarship from Wicklow AI & Medicine Research Initiative.
- Kaggle competition winner, presented at the USF Data Science Seminar.

## **COURSEWORK**

- Machine Learning, Deep Learning, Computational Statistics, Time Series Analysis, Data Structure, Algorithms, Distributed Computing (PySpark), Data Visualization
- Certification: <u>Deep</u> <u>Learning Part I - fast.ai</u>

## **VOLUNTEER**

**Tech Mentor**: Microsoft Girls in AI Hackathon in San Francisco