

Timothy Li

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WORK EXPERIENCE

FACEBOOK | SOFTWARE ENGINEERING INTERN

June 2020 – Aug 2020 | Menlo Park, CA

- Primary Project | Added image recognition functionality to Messenger's Advanced Context Search feature.
- Side Project | Trained new broadcast flow model with filtered positive session data and removed positional effect bias.

REX | DATA SCIENCE INTERN

May 2019 – Aug 2019 | Los Angeles, CA

- Primary Project | Implemented a housing price prediction model with a boosting algorithm. Performed feature selection with elastic net and parameter optimization with grid search. Integrated ensemble model with the Rex internal pricing model to improve the Rex pricing system.
- Award | Engineering intern of the summer.

RELEVANT ACTIVITIES

PERSONAL PROJECTS

- Effects of Coronavirus on Realized Volatility | timsaur.github.io/projects - Analyzed the effects of the Coronavirus pandemic on the S&P realized volatility, and also compared the realized volatility of the S&P across presidential terms.
- Finding Nash Equilibrium in Zero Sum Sequential Games | timsaur.github.io/projects - Used a counterfactual regret minimization algorithm to develop an "optimal" strategy of playing Rock, Paper, Scissors and Kuhn's Poker.
- NewStock | newstock2018.herokuapp.com - Visualized correlation between stock price and news article sentiment with Kensho Knowledge Graph API.
- TextCompanion | textcompanion.herokuapp.com - Performed sentiment analysis on user-inputted text with Watson API.

COURSEWORK

- Harvard College | Statistical Inference, Probability, Machine Learning, Data Structures and Algorithms, Applied Linear Algebra and Big Data, Economics and Computation, Theoretical Computer Science, Programming Languages.
- Online | DeepLearning Specialization - DeepLearning.ai, Machine Learning - Andrew Ng, Foundations of Data Analysis - UT Austin, Introduction to Computational Thinking and Data Science - MITx.
- SciPy 2019 | Bayesian Statistics, Complexity Science, Deep Learning Fundamentals: Forward Model, Differentiable Loss Function, and Optimization Routine.

RESEARCH

MACIVER LAB, STANFORD UNIVERSITY | NEUROSCIENCE RESEARCHER

June 2017 – Aug 2017 | Stanford, CA

- Used electrophysiological techniques to test novel general anesthetics on rat hippocampi.
- Wrote a script in Java that automated the data processing step.

ORCHARD LAB, CSUF | MEDICINAL CHEMISTRY RESEARCHER

October 2016 – May 2017 | Fullerton, CA

- Synthesized pharmaceuticals to target the Human Papillomavirus (HPV) E6 protein.

TAO LAB, CSUF | COMPUTATIONAL CHEMISTRY RESEARCHER

May 2016 – Aug 2016 | Fullerton, CA

- Used Gaussian09 to model atmospheric interactions of sulfur dioxide and water clusters.

EDUCATION

HARVARD UNIVERSITY

M.S. IN STATISTICS

Expected May 2022

A.B. IN COMPUTER

SCIENCE

Expected May 2022

Cambridge, MA

School of Engineering and Applied Sciences

GPA: 3.8 / 4.0

SKILLS

PROGRAMMING

Over 5000 lines:

Python • C++ • Java

Over 1000 lines:

OCaml • Matlab • HTML/CSS

Familiar:

Haskell • Prolog • R •

JavaScript • SQL • LaTeX

PACKAGES

Statsmodels • SciKit-Learn

• Keras • Pandas • Bokeh •

Tensorflow • Plotly • SciPy

• Seaborn • Matplotlib •

XGBoost

TECHNOLOGIES

Tableau • Git • MySQL •

PostgreSQL • Jira • Docker

• Kubernetes

AWARDS

2018 – Best in Class

HackLA hackathon

2017 – National Top 50

US Chemistry Olympiad

2017, 2018 – 1st place

Science Olympiad Nationals

2015 – 1st place

International art

competition

INTERESTS

Drawing, Rock Climbing,

Running, Scuba Diving,

Guitar, Poker, Piano