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. Once in production, this feature will allow users to quickly search for images in their chat threads.
- Secondary Project - Modified the current multi-task multi-label broadcast flow model used in content sharing by filtering input data and removing positional effect bias.

REX | Data Science Intern
May 2019 – Aug 2019 | Los Angeles, CA

- Primary Project - Used a boosting algorithm to implement a housing price prediction model. Used elastic net for feature selection and grid search for parameterization. Combined this model with existing architecture to improve Rex's pricing algorithm.
- Award - Engineering intern of the summer.

RELEVANT ACTIVITIES

PERSONAL PROJECTS

- Effects of the Coronavirus Pandemic on Realized Volatility | timsaur.github.io/projects - Used realized volatility of the S&P 500 to quantify the effects coronavirus had on market variance. Also used this volatility to compare variance 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 to play 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), Real Analysis (Harvey Mudd), Machine Learning (Andrew Ng), Foundations of Data Analysis (UTAustinX), 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 • Presto

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