Lei Lei

+65 8898 4105
galileilei@gmail.com
nextjs-galileilei.vercel.app
www.linkedin.com/in/lei-lei-1001

Education

Sep 2019 – Sep 2014 **Stanford University**, *M.S. in Computational and Mathematical Engineering*.
- Completed 135 units of course works. Notable courses are:
- CS courses: CS107, CS110, CS148, CS369G, CME213, CME251, MS&E 317, EE364A, EE364B, CS369M, EE376A.
- AI courses: AA228, CS229, CS231N, CS246, CS251.

May 2014 – Sep 2011 **Duke University**, *B.S. in Mathematics and Economics*.
- Graduated with *cum laude*, Dean's List with Distinction in 2013 and Freshmen Julia Dale Prize in Mathematics in 2012.

Experience

Since May 2021 **Algorithm Engineer**, *Lazada*, Singapore.
- working on Lazada recommendation frameworks and algorithms to improve Click Through Rate (CTR) and Gross Merchandise Value (GMV).

Apr 2020 – Apr 2021 **Data Scientist**, *Cartrack*, Singapore.
- Prototyped a ML pipeline for car theft detection, in Python with DataSketches/SQL.
- Prototyped a REPL for Kalman filtering algorithms, in Python/Typescript with Next.js/FastAPI.

Sep 2019 – Sep 2015 **Graduate Research Assistant**, *AA Department, Stanford University*, Stanford.
- Performed four years of reasearch in pursuit of PhD before exiting program.
- Researched on matrix completion/low rank approximation algorithm for high dimensional physics problems.
- Implemented distributed/parallel version of above algorithm in C++ with Eigen/Armodillo/OpenMP.

Projects

Autumn 2017 **Reinforcement Learning for Network Architecture**, *project from CS 229, code, paper, poster*.
- Implemented a recurrent network(LSTM) to tune hyperparmeters in a deep network(DCNN).
- On MNIST, our model produced a DCNN with 98.6% accuracy.

Spring 2017 **Identifying Cervix Types using Deep Convolutional Networks**, *CS 231N, code, paper*.
- Implemented four different Deep CNN (Inceptions, VGG16, Resnet, AlexNet) to identify cervix types.
- Experimented with various heuristics to improve prediction accuracies.

Autumn 2016 **Bootstrapping Neural Network with Auxiliary Tasks**, *class project from AA228, paper*.
- Developed various stochastic policy networks for a multi-agents game.
- Bootstrapped policy network with auxiliary tasks to accelerate convergence.

Winter 2013 **Jump Trading 2013 Challenge**, *Winner of the online competition, paper*.
- Modeled a betting game as a Markov Decision Process and solved with value iteration.

Skills

Distributed Spark, OpenMP

ML Tensorflow, Pytorch

Language Python, C/C++, SQL

Honors/Awards

2008 **International Mathematical Olympiad, Silver**.

2008 **Asian Physics Olympiad, Honorable Mention**.