

KEN NOH | SOFTWARE ENGINEER

(650) 862-2534 | kennoh415@gmail.com | linkedin.com/in/khnoh | github.com/SquareDorito

EDUCATION

Brown University – Providence, Rhode Island
B.S. Computer Science, Major GPA: 3.9

Sep 2016 – May 2020

Relevant Coursework:

Computer Networks	Statistical Inference	Programming Languages	Monte Carlo w/ Financial Applications
Distributed Systems	Machine Learning	Software Security	Design/Analysis of Algorithms
Operating Systems	Deep Learning	Web Applications	Data Science (Masters)

EXPERIENCE

Merk Investments – Software Engineer (Remote)

Nov 2019 – Present

- Built FIX message framework in Python to enable automated, intraday FX trading strategies on 360T's FX marketplace
- Researched non-linear classifiers and autoregressive models to predict trends in FX data, using techniques such as feature importance analysis with random forests, denoising through PCA/autoencoders, and seasonality/trend analysis

Two Sigma Securities – Trading Engineering Intern

May 2019 – Aug 2019

- Worked on the Market Making Index Arbitrage Trading Systems Team; developed a full-stack application to provide a fast, normalized, and centralized way to manually monitor all of Two Sigma Securities' trading activity.
- Built a RESTful Python API and front-end with optimized search capabilities to handle over 15 million orders per day.

AlBrain – Software Engineering Intern

Jun 2018 – Aug 2018

- Created a semantic clustering module which was used in the *Memory Graph* product to trigger self-reorganization of phrase data stored in an acyclic graph structure.
- Implemented the *skip-thoughts* embeddings model which improved categorical accuracy of phrase data by over 15% and reduced memory usage by over 10% in the *Memory Graph* product.

Brown University CS Department - Teaching Assistant

May 2018 – May 2020

- Served as a teaching assistant for CS1410 (Artificial Intelligence), CS1420 (Machine Learning), DATA2040 (Data Science)
- Responsible for creating and updating assignments, grading homeworks and exams, and holding weekly office hours.

Salomon Laboratory – Software Engineering Intern

Jun 2017 – Sep 2017

- Streamlined the proteomics pipeline by implementing *Andromeda* and *MaxQuant* to improve sequencing time and depth.
 - Moved quantitation up into the pipeline and used R's parallel library to remove bottlenecks caused by richer data types.
-

PROJECTS

Planarity – Optimization Algorithms on Planar Graphs

- Pursued an independent study for two semesters with Professor Philip Klein, adding features to the *Planarity* codebase
- Implemented a new branch decomposition algorithm which computes a carving decomposition as an intermediary step, fixing bugs related to self-loops in the medial graph and non-simple boundaries (read more: kennoh.com/planarity_writeup.pdf)
- Successfully generated solutions in arbitrarily large graphs for the following: Edge Cover, (Steiner) Traveling Salesman

DobbyBot – Cryptocurrency Trading Bot

- Built a cryptocurrency bot using *Binance* and *Coinbase* APIs, primarily supporting arbitrage and momentum tactics.
 - Developed a Python framework to backtest tactics on historical data and run data analytics to discover new tactic ideas.
 - Currently training autoregressive neural networks to predict up/down/no movement in price given the current tick.
-

SKILLS

Languages: C, C++, Python, Java, JavaScript, Go, Pyret

AWARDS

Citadel Trading Challenge hosted by Brown University – 1st Place

Feb 2020

Jane Street Electronic Trading Challenge – 1st Place Overall

Jul 2018

AMC 12 A – Distinguished Honor Roll (Top 1%)

Feb 2015

USA College Ultimate – 2018 D-I Second Team All-Region (NE), 2019 D-I National Champion