

Harry Y. Wang

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EDUCATION

Duke University — Aug 2016 - May 2020

Double BSc in Computer Science and Statistics GPA: 3.73

Relevant Coursework: Machine Learning (CS671), Design and Analysis of Algorithms (CS330), Software Design and Implementation (CS308), Data Mining and Machine Learning (STA325), Data Structures and Algorithms (CS201), Operating Systems (CS310), Bayesian Methods & Modern Stats (STA360)

EXPERIENCE

Machine Learning Intern, IQVIA — May-Aug 2018

- Used ML to create synthetic data from PHI datasets without risk of identification
- Designed a new patent-pending protocol to validate the accuracy of data up to 96%
- Created a model architecture to formulate new drug compounds in drug discovery

Software engineering Intern, Seedr — May-Aug 2017

- Created a prototype in GoLang that aims to improve current WebDAV standards by 200%
- Designed the prototype by researching which modern network protocol should be used
- Researched the advantages and flaws of network and file sharing protocols
- Analyzed the impact of different congestion control algorithms on P2P protocols

PROJECTS

ML Stock Market Prediction and Algorithmic Trading — Aug 2018

- Used a CEFLANN to classify and predict next day stock price index movement
- Mined and feature engineered SP500 data for training and index indicators
- Designed a trading strategy with an overall 30% total returns (2017-2018)

Drug Generation — Jul 2018

- Built a GAN model in Keras to generate 3D drug compound structures to aid in discovery
- Trained the model using data scraped from DrugBank with labels for desired traits
- Plans to integrate with a system to validate the generated drugs on feasibility

Data Visualization in Political Sphere — May 2018

- Built a web app that allows a user to monitor and visualize political data
- Utilized the GMaps API and data to show members of congress (MoC) by state
- Visualized a 3D network graph of MoC that can be clustered by state and color coded by party affiliations

LEADERSHIP & EXTRACURRICULARS

Teaching assistant, Discrete Maths — Jan-May 2018

- Lectured 15 students weekly on math proofs for algorithm correctness and analysis
- Held office hours and graded student work weekly on mathematical concepts

Secretary, Brownstone Living Group — May 2018-present

- Provided administrative support to members by maintaining schedule and event calendars
- Composed weekly reports and established work procedures to track member tasks

SKILLS

Language Skills: English Native Proficiency; Mandarin Fluency

Technical Skills: Python; Keras; TensorFlow; Java; C; GoLang; MySQL; Solidity; Javascript; HTML; CSS