Jady Tian

+1(646)469-8025 | jady.tian@columbia.edu | linkedin.com/in/jadytian

EDUCATION

Columbia University, The Fu Foundation School of Engineering and Applied Science

Bachelor of Science - Operations Research, Minor: Computer Science *September 2017 - May 2021*

Relevant Coursework: Advanced Programming in C/C++, Artificial Intelligence, Data Analysis in R, Discrete Mathematics, Foundations of Optimization, Ordinary Differential Equations, Databases, Simulation Modelling, Stochastic Equations

WORK EXPERIENCE

Software Engineer Intern | BlackRock *New York, NY* July 2020 - August 2020

- Designed and developed an automatic health alert healing system for servers in database environment using Python and Perl to decrease need for manual intervention by solving 80% of the deadlock situations
- Expanded the system's design by including duplicate connection situations as well as creating a testing environment to account for randomized edge cases and reduce testing time

Backend Engineer Intern | Bytedance *Shanghai, China* May 2020 - July 2020

- Designed and implemented a data retrieving application based on XPath and JSON using Python in a security sensitive environment to facilitate data operations and managing process
- Created data processing protocols in Go to sort out unwanted inputs and output critical data upon users' requests

Data Science Researcher | Department of Design and Construction *New York, NY* March 2019 - May 2020

- Conducted data science research under the guidance of Columbia Data Science Institute on New York City's construction projects over 25M in budget to explore the systemic drivers of cost overruns and schedule delays
- Processed data based on significant metrics and ran statistical tests using Python and Excel to deliver evidence-based analysis and propose changes in policies and practices

Computer Science Research Assistant | Columbia University *New York, NY* May 2019 - December 2019

- Assisted Professor Gail Kaiser's research in building Social Addictive Gameful Engineering (SAGE), an intelligent game-based learning and assessment system that infuses computational thinking in grade 6-8 curricula
- Implemented features for the gameful direct instruction system to improve efficiency and usability and ran A/B testing on its frontend to assess robustness and effectiveness in teaching children computational thinking skills

Frontend Engineer Intern | Newton Labs *Sunnyvale, CA* June 2018 - January 2019

- Designed system user interfaces and developed new company-facing landing pages to attract usage of 9 companies looking to hire and students from 6 universities looking for job opportunities, increasing daily active user by 60%

PROJECTS

Frederick National Laboratory for Cancer Research Project September 2020 - January 2021

- Collected and cleansed kinase inhibitor drug datasets using Excel and analyzed their target selectivity based on their molecular fingerprints and mordred descriptors using Python
- Built a random forest machine learning model and utilized hyperparameter optimization to understand kinase inhibitor protein selectivity pattern and predict potential side-effects

metaCollege September 2017 - December 2017

- Designed an online platform for Columbia University students to buy and sell school related items from textbooks to beyond the classroom, encouraging reusability of items and fostering community through the various exchanges
- Hosted sales by collecting all unused books and school supplies at the end of the school year to sell at the beginning of the next school year; gathered around 200 books during the year of 2018

SKILLS AND INTERESTS

Technical Languages: C/C++, Java, Python, HTML/CSS, R, SQL, Go

Technologies: Arduino, Autodesk Fusion 360, Photoshop, Lightroom, Sketch, Gurobi

Interests: photography(film, DSLR), volunteering(teach children art and coding, animal shelter), sports(running, tennis)