

Hong Sen Du

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EDUCATION

Columbia University – Manhattan, New York
Bachelors of Science in Computer Science / Minor in Economics
GPA: 3.8/4.0

Expected Graduation: May 2023

RELEVANT COURSES:

- Advanced Programming (C)
- Computational Lin. Algebra (Python)
- Data Structures (Java)
- Discrete Mathematics (Python)
- Intro to Computing (Python)
- Art of Engineering (Arduino)

TECHNICAL/NON-TECHNICAL SKILLS:

- Microsoft Word, Excel, PowerPoint
- Web Development
- Java, C, C++
- LaTeX, UNIX, Git
- Firebase auth. and database
- Python, Pandas, and NumPy
- AWS, Redshift, and SQL
- React and Web Scraping
- Redis and Cron

EXPERIENCE

Instascreener, Manhattan, NY

Marketing and Data Science Intern

January 2020 – Present

- Developing and maintaining an API that uses machine learning to **analyze millions of Instagram influencers** to detect fake followers and help companies visualize how their sponsorships perform
- Wrote a python script that **performed sentiment analysis on every influencer** to give each an average sentiment score based on follower comments on sponsored posts in order to help brands improve their marketing strategy
- Analyzing and publishing trends from **a sample of 16 million posts worldwide** on how Instagram's business decisions decreased post engagements by 11%

Columbia Spectator, Manhattan, NY

Associate Software Engineer

October 2019 – Present

- Worked on a team tasked with **migrating thousands of published articles** on Columbia Spectator's website onto a React framework to improve scalability and simplify the process of uploading new articles written by journalists
- Wrote an algorithm that autonomously **handled the migration of over 50 specially created articles** onto the new website
- Developed script that used filtered data from a backend database to handle how articles are displayed on the home page that is **visited by over 360,000 readers each month**
- Utilized Redis and NGINX to **dynamically update the top stories list** displayed on the side of **every article** on the website

Faith In New York, Queens, NY

Web Developer

July 2017 – January 2018

- Designed the nonprofit's website focused on voter activism and immigration aid to **improve communities across NYC**
- Utilized Google Maps API and Google Analytics to **track website user-flow of over 150 visitors each day**
- Developed "Faith Over Fear" platform focused on providing information about the candidates of the 2017 NYC election through Candidate Voter Guides, Candidate Forums, and Voter FAQs that **reached over a thousand website viewers**
- Created a database to store information about the candidates using SQL

LEADERSHIP/ORGANIZATIONS:

ShelterLinks

Lead Software Engineer

July 2018 – July 2019

- Developed an app that provided a centralized platform for homeless shelters, food kitchens, and food pantries to post events that volunteers can sign up for to receive coupons at local businesses
- Met with over twenty homeless shelter directors and business owners to discuss accessible design for seamless event creation, management, and point redemption

AtomHacks Hackathon Committee

Senior Committee Member

December 2017 – June 2019

- Organized and coordinated two annual 12-hour hackathons at Bronx Science, a school of over 3,000 students
- Reached out to potential hackathon sponsors, leading to Soylent annually donating 72 bottles of their product
- Gave computer science workshops during the events on topics ranging from app creation to web development

ACTIVITIES/AWARDS

- **JADE** – Gained insight into NYC's tech environment through meaningful discussions with industry leaders and refined web development skills
- **Work Study** – Organized and staffed over ten events hosted by the South Asian Institute as an administrative assistant during Fall 2019
- **DevFest Best Social Good Hack** – Built app that provides a central map to streamline communication with food pantries and donors for those experiencing food insecurity.
- **Congressional App Challenge** – First place in District 14; ShelterLinks app showcased in Washington D.C.; invited to demo app to senators
- **NFTE Startup Business Competition** – Second Place; worked on a team of five to develop a business plan and marketing strategies for a fictional startup
- **The Diamond Challenge** – Semi-finalist; competed with ShelterLinks Startup team against global teams during annual summit in Delaware