

# Yixin Pan

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## Education

### Columbia University

**M.S. in Computer Science** (Natural Language Processing Track)

New York, NY

Expected Dec 2022

### Johns Hopkins University

**B.S. in Computer Science**, Minor in Entrepreneurship and Management, GPA: 3.81/ 4.00

Baltimore, MD

Aug 2019 - May 2021

Courses: Object-Oriented Software Engineering, Database, HCI, NLP, Machine Learning, Deep Learning

## Skills & Abilities

### Programming Skills

- Java, Python, C/C++, MySQL, HTML, CSS, JavaScript, MATLAB, Scheme, Haskell
- Full Stack Development with MERN/ Javalin
- Data Analysis & Visualization with Python

### Other Skills

- Excel for Financial Analysis & Data Analysis, Mathematica, Origin, LaTeX, Linux Command
- ML: NumPy, PyTorch, Scikit-Learn, TensorFlow
- Axure RP Pro/Figma for UI & UX Design

## Professional Experience

**CA Application Platform**, Johns Hopkins University (Feb 2020 - May 2021)

*Co-developer*

- Designed and implemented user-centered CA Hiring website with MERN Stack to streamline the application process (JHU SIS authentication and verification) and hiring process (data visualization and intelligent ranking system)
- Applied Agile methodology with each iteration followed by user contextual experience evaluation

**Revased, LLC**, Baltimore, MD (Summer 2020)

*Software Engineering Intern*

- Assisted company's official website migration from Squarespace to Shopify using liquid
- Detected functional and aesthetic disadvantage of Revased website, redesigned the User Interface for cart, checkout, and email formatting pages, and implemented the changes as new features onto website
- Applied customer order information with data analysis techniques to interpret customer groups and patterns

## Programming Projects and Researches

**Intuitive Computing Lab**, Johns Hopkins University (Feb 2020 - May 2021)

*Research Assistant*

- Extended the vanilla social force model to simulate the walking behaviour of pedestrian social groups
- Sketched and built a virtual office environment with Unity and tested social force model with it

**Delineo covid-19 Modeling project**, Johns Hopkins University (May 2020 - Aug 2021)

*Co-developer*

- Aimed to develop a new model that more accurately understands and predicts the spread of diseases such as COVID-19 considering different types and sizes of communities and lag time of spreads across areas.
- Developed the website with MERN (Front-end prototype with Adobe XD), created data visualization for simulation result, and participated in ML algorithm brainstorm and hmm method implementation
- Implemented Markov/LSTM model, applied Geolocation data in different algorithms to discern movement patterns/anomalies within different communities, and reflected in the simulation process

## Extracurricular Activities

**TEALS Volunteer**, Microsoft TEALS Program (Sep 2020 - May 2021)

- Assisted high school teacher with a CS curriculum and inspired students to consider CS career development

**Peer Tutor & Course Assistant** (Sep 2018 - May 2021)

- Tutored CS-related course and CA in Business Analytics, Artificial Intelligence and OOSE (10 - 16 hours per week)

**Chinese Students and Scholars Association**, Case Western Reserve University (Oct 2018 - Aug 2019)

*Vice President*

- Organized Annual Recruitment, monthly activities planning, and constitution revision