# Xinzhe Chai

### BROWN UNIVERSITY '23 // COMPUTER ENGINEERING & STATISTICS SC.B.

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### **SKILLS**

#### **PROGRAMMING**

Java, Python, Flask, JavaScript, MATLAB, R

#### **SOFTWARE**

Adobe XD, Figma, SolidWorks, RStudio, Animate, Lightroom

### **OTHERS**

SQL, HTML/CSS

# **COURSEWORK**

#### COMPLETED

Object-oriented Programming, Data Structures & Algorithms, Linear Algebra, Multivariable Calculus, Statistical Inference

### **ENROLLING IN**

Computer Systems, Hypertext, Deep Learning, E&M, Biostatistics and Data Analysis

Anticipated Graduation: May 2023 GPA: 3.875

# **AWARDS**

Accenture Prize for Technology Innovation

Hack@Brown 2020

## **PROJECTS**

#### **GOODREADS PREMIUM**

Flask, PostgresSQL & HTML / May 2020

- A book database that allows users to query 5000+ titles and post reviews.
- Displays relevant book data using API data from OpenLibrary and GoodReads.
- Implemented a simple user authentication system from scratch.
- Includes an API that returns book info in JSON given ISBN number.

### **EXPERIENCES**

### WEB DEVELOPMENT INTERN

Keva Health / July 2020 - August 2020

- Led the website rebuild project in a team of 5; iteratively designed and eventually built the website with WordPress and HTML/CSS. Scheduled to go live in late August.
- Coordinated content production, completed migration and utilized Google Analytics to track and model user behavior.
- Drafted company's branding strategies and pushed for a unified visual representation in company promotional materials.

#### FULL STACK ENGINEER / EVENT ORGANIZER

Full Stack at Brown / January 2020 - Present

- Led a group of 3 to design and implement the Brown Institute of Policy website. Technology used includes Figma, HTML and CSS (ongoing).
- Contributed to the Brown Q&A project as a full stack engineer (ongoing). Implemented 3 Handlebars templates and 5 Express routing modules.
- Held weekly meetings with clients to report progress and collect feedback.
- Designed event schedules and contacted 4 speakers for the Hack@Home online hackathon, Event scheduled in October 2020.

#### FOUNDING ORGANIZER

TEDxUWCChangshu / August 2017 - May 2019

- Led a team of 18 and organized 3 TEDx events. In total, events attracted more than 800 people to attend from multiple cities around the region.
- Managed and coordinated the 4 groups inside the organizing team; sketched and published event visual design using Adobe Animate and Photoshop.
- Oversaw budget, funding, and sponsorship of the event; Raised 20,000 CNY in total through ticket revenue and school sponsorship.

### MEDIA PROJECT MANAGER

Mini-UWC Summer Program / August 2016 - August 2019

- Co-led a team of 6 to publicize Mini-UWC on social media, in charge of camp photography and program media production.
- Taught photography classes daily to teenagers of 12-16 years old with a hands-on approach, received the highest rating in post-program survey.

#### **EVOLUTION**

JavaFX / May 2020

- A classic flappy bird game with Neural Network.
- Used 4 input nodes, 1 intermediate layer, and ReLU function to implement the Neural Network.
- Birds start to learn after the first few iterations, and the algorithm tends to converge around 50 iterations.
- Code available upon request.

### TRADE TRACKER (ONGOING)

Python, Pandas / May 2020

- A command line interface that analyze realized profit for each trade.
- Since the average cost of a stock changes as you buy the stocks at multiple levels, this CLI helps you to log your trade and track your profits.
- Utilizes Pandas to perform number operations, while reading and writing data from/to an Excel file.