

# JiaXi Li

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## EDUCATION

**University of Illinois at Urbana-Champaign**

*Bachelor of Science in Computer Science*

*Bachelor of Arts in Economics*

Expected Graduation: May 2023

GPA: 3.91/4.00

- Relevant Coursework: Data Mining Principles, Computer Vision, Machine Learning, System Programming, Introduction to Algorithms & Models of Computation, Database Systems, Text Information Systems

## PROFESSIONAL EXPERIENCE

**ClassTranscribe Project**

*Head Researcher*

Champaign, IL

January 2021-Present

- Enhance backend capability and speed performance for ClassTranscribe, a web-based video lecture platform, through Docker and C# language
- Devise algorithm that automatically detects and extracts scenes from ClassTranscribe video lectures by adopting Python language and OpenCV that successfully received funding from Microsoft
- Design new speech recognition approach via Python language and Tesseract OCR by providing individual video with a phrase list of semantic information, which upgraded recognition accuracy by 9%
- Remodel method to automatically generate a comprehensive E-Book for each lecture video that encourages novel learning experience for university students
- Presented intermediate research findings at the Undergraduate Research Symposium and created and led an evidence-based poster, which improved my communication and presentation skills

**Data Mining Principles Group Project**

*Researcher*

Champaign, IL

January 2021-May 2021

- Cooperated with group members to create an algorithm which can detect opinion spam in Yelp.com via machine learning techniques such as embedding and bidirectional LSTM
- Implemented this method through Python language and PyTorch, which achieved 6% higher classification accuracy than other previous methods
- Compiled a professional conference article that summarized all the research findings by LaTeX

**IOS Application Project**

*Developer*

Champaign, IL

November 2020-December 2020

- Built a mobile application called GitHub Helper via React Native and Expo, which collects and displays user information from GitHub
- Programmed a simple and well-organized user interface of four screens to present various content
- Enabled fetching and updating from database in real time by implementing application programming interfaces

**Simple Physics Engine Project**

*Developer*

Champaign, IL

November 2020-December 2020

- Constructed a software which can simulate real-world particle system with fine-grained physical effects by JavaScript language and WebGL
- Rendered realistic animations by imposing velocity and gravity on objects in the particle system, and then shaded objects using Blinn-Phong illumination model with Phong shading
- Deployed the software on a web-based application with UI to allow creating and resetting objects via HTML

## LEADERSHIP EXPERIENCE

**Probability & Statistics for Computer Science**

*Course Assistant*

Champaign, IL

September 2019- May 2020

- Completed homework grading and regrade requests each week for more than 150 students
- Collaborated with other course assistants to design and refine homework and the project for the class
- Practiced multi-tasking by balancing my own student assignments and course assistant work

## SKILLS & HONORS

- **Skills:** C (Advanced), C++ (Advanced), Java (Advanced), Python (Advanced), JavaScript (Advanced), SQL (Advanced), React Native (Intermediate), HTML (Intermediate), C# (Intermediate), Docker (Intermediate)
- **Honors:** James Scholar (2019-2020), Dean's List (Fall 2018, Spring 2019, Fall 2019, Spring 2020, Spring 2021)