

# Stanley Jiang

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## Education

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### Cornell University

August 2021 – May 2024 (Expected)

- Computer Science Major, 4.084/4.00 GPA
- Courses: Object-Oriented Design and Data Structures - Honors, Data Structures and Functional Programming, Discrete Structures, Introduction to Analysis of Algorithms, Introduction to Machine Learning, Computer System Organization and Programming

## Experience

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### Frutto Research Group, Summer Intern

June 2022 – August 2022

- Used Solidity and ReactJS to help build a decentralized exchange (DEX) operating on the Avalanche Fuji Testnet and verified token swapping under different price schemes.
- Researched capital inefficiencies in decentralized markets and proposed the adaptation of the Proactive Market Making (PMM) algorithm to a multi-token pool, contributing to our presentation and project proposal at the 2022 IC3 Blockchain Camp.

### Cornell University, Undergraduate Consultant

August 2022 – December 2022

- Assisting in grading exams, answering questions, and holding office hours for CS 2112: Object-Oriented Design and Data Structures - Honors

## Projects

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### The Whether Bee – Instant Messaging Web Application, [github.com.stanleyjiang25/Webchat](https://github.com/stanleyjiang25/Webchat)

- Created a fully-functioning instant-messaging web application with chat bots for users to talk to.
- Used OCaml (including Opium and Caqti third-party libraries) to create endpoints on our back-end system and support other back-end functionality.
- Efficiently stored and queried user data in a database with PostgreSQL.
- Built a graphical front end in a web browser using Javascript and VueJS.

### Trainstris – Tetris Training Platform, [github.com/stanleyjiang25/Trainstris](https://github.com/stanleyjiang25/Trainstris)

- Created a one of a kind Tetris training platform using ReactJS.
- Produced revolutionary scoring methodology to evaluate Tetris board states and end mindless practice.

### Simulating Evolving Artificial Life

- Created a simulation of a simple world of critters that interact with each other and the surrounding terrain and evolve through mutations to the code responsible for their behavior.
- Built a graphical front end using JavaFX.
- Implemented a fully functional programming language by creating a parser and interpreter with Java.

## Activities

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### Math Talk on Bézier Curves, [stanleyjiang25.github.io/BezierCurves.pdf](https://stanleyjiang25.github.io/BezierCurves.pdf)

May 2021 – August 2021

- Explored the mathematical modeling capabilities of Bézier curves on polynomial functions to assess the possibilities and limitations of Bézier curves in computer graphics.
- Proved the existence of an exact representation of any interval of any polynomial curve through a recursive construction of control points of a Bézier curve.

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**Programming Languages and Frameworks:** Java, OCaml, C++, Solidity, HTML/CSS, Javascript, ReactJS, PostgreSQL, VueJS, L<sup>A</sup>T<sub>E</sub>X, JavaFX

**Clubs:** Cornell Science Olympiad, Cornell Undergraduate Math Club

**Awards:** 2x Princeton University Mathematics Competition Individual Finalist, Harvard-MIT Math Tournament 3rd place team, 6x AIME Qualifier

**Interests:** Tetris, piano, drawing, clarinet, and overused jokes