

# Brian Xu

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## EDUCATION

### Stanford University

Stanford, CA

Bachelor of Science in Mathematics, Intended Coterminal Masters of Science in Statistics

Expected June 2025

Cumulative GPA: 4.08/4.0

**Relevant Coursework:** Machine Learning, Statistical Inference, Stochastic Processes, Functional Analysis, Topology and Geometry, Introduction to Regression Models and ANOVA, Nonparametric Statistics, Game Theory, Microeconomics (PhD Level), Machine Learning for Sequence Modeling

## WORK AND RESEARCH EXPERIENCE

### Citadel Securities

New York, NY

Incoming Quantitative Trading Intern

Summer 2024

### Five Rings LLC

New York, NY

Quantitative Trading Intern

Jun 2023 - Aug 2023

- Used rigorous quantitative and data analysis skills to complete a research and development project under mentorship from a full-time Quantitative Trader; received classroom-style instruction on a wide range of financial concepts.
- Participated in mock trading to obtain familiarity with how the market operates at the level of individual orders (placed 2nd overall among all interns) and competed in automated trading strategy and design competitions.

### Stanford Alexa Prize Team - Chirpy Cardinal

Stanford, CA

NLP Researcher and Developer

Dec 2022 – Present

- Developing chatbot for the Amazon Alexa Prize Competition using python; researching novel NLP techniques to improve quality of generated responses; contributed to 1st place overall finish in Scientific Innovation Category for the competition.

### Stanford Theory Group - CURIS Fellow

Stanford, CA

Algorithms Researcher

Jun 2022 – Aug 2022

- Designing efficient parallel algorithms with stochastic methods for sampling from density functions on hyper-cubes and arbitrary ground sets and proving theoretical lower bounds using information theoretic ideas.
- [Paper](#) published in the 2023 ACM Symposium on Theory of Computing (STOC).

## UNIVERSITY PROJECTS

### Multilabel Music Subgenre Predictor

Dec 2022

- Designed and implemented multilabel music subgenre predictor employing a feed-forward neural network using PyTorch; experimented with multiple dimensionality reduction techniques such as Isomap, PCA, and Logistic Regression to improve accuracy of a neural network.

## ACTIVITIES

### Stanford Data and Mapping for Society

Stanford, CA

Vice President of Operations

Mar 2022 - Present

- Supported 30+ students learning R through student-taught club courses; facilitated professional partnership with DataCamp, providing 20+ students with online learning resources.
- Used R with Google Maps API to visualize red-lined neighborhoods in a data consulting project for nonprofit.

### Students Tutor Students

Portland, OR

Founder and President

Apr 2020 - Sep 2021

- Founded a nonprofit and led a team of 70+ students to develop a tutoring program for over 400+ students in 20+ schools.
- Created a free online summer camp for 100+ low-income elementary and middle school students during COVID-19.

## ADDITIONAL

**Technical Skills:** Python, R, C++ (Limited Proficiency)

**Awards:** 3x USA(J)MO Qualifier, 2021 Coca-Cola Scholar, USAPHO Semifinalist, USACO Gold, USNCO Semifinalist