

Vivan Sen Das

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EDUCATION

The University of Chicago

Chicago, IL

Bachelor of Science in Computer Science: Specialization in Computer Systems, Minor in Classical Studies

Expected, June 2027

Overall GPA: 3.75/4.00

- **Financial Markets Program:** Selective, three-year program focused on building quantitative finance acumen through weekly workshops, personalized advising, employer visits and coursework at the Chicago Booth School of Business
- **Relevant Coursework:** Data Structures I & II, Systems Programming I & II, Discrete Mathematics, Theory of Algorithms, Complexity Theory, Introduction to Computer Security, Introduction to Data Science, Physics Mechanics and E&M

Groton School

Groton, MA

High School Diploma: Summa Cum Laude, Honor List 2019-2023

2019 – 2023

EXPERIENCE

EXL Service

New York City, NY

Analytics Consultant Intern

June 2025 – Present

- Developed a Python-based web scraper utilizing the SERP API to extract pricing and listing metadata for thousands of products across multiple e-commerce platforms, enabling competitive pricing analysis and product benchmarking.
- Retraining a domain-specific Named Entity Recognition (NER) model to improve extraction accuracy on data from two major sports leagues, enabling better downstream analytics and insights.
- Developed a semi-automated annotation pipeline using custom heuristics and manual review to generate a labeled dataset as inputs for model retraining.

UChicago Institute of Politics

Chicago, IL

Web Development and Cybersecurity

March 2024 – December 2024

- Implemented client-side security protocols and worked with stakeholders to ensure a safe digital experience for marginalized users
- Designed interactive mini map and festival checkpoint tracker with ReactJS, HTML, and CSS on website frontend for local festival

PROJECTS

Midwestern Trading Competition ([GitHub](#))

Chicago, IL

Algorithmic Trading Software Development

March – April 2025

- Placed 5th overall out of 41 teams from the nation's top universities; ranked 1st among teams from UChicago.
- Engineered a Python-based trading bot that executed market-making and directional strategies across simulated equities and ETFs.
- Implemented dynamic fair value estimation, bid/ask quoting, and spread adjustment logic based on real-time data and inventory risk.
- Designed a portfolio allocation model that dynamically optimizes asset weights based on statistical signals from historical data.

Custom Unix Shell

November 2024

- Developed a custom UNIX-style shell in C supporting batch command execution, I/O redirection, and file prepending.
- Defensively programmed to account for user error and tested rigorously with 100+ edge cases.

LZW File Compressor

October 2024

- Built a file compression program in C that uses LZW encoding, achieving a compression ratio between 20% and 50% on text files.
- Implemented dictionary table pruning and variable bits printed per entry features allowing for granular control over output.

Soccer Match Prediction Project

August 2024

- Trained a Random Forest Classifier model using scikit-learn to predict Premier League match winners with 60% accuracy.
- Scraped and processed data for 1800+ matches using Python; smoothed data using rolling averages.

GO Board Game: Python

February – March 2024

- Worked in a team to build terminal-based version of the Go board game with player vs. player and player vs. computer support.

LEADERSHIP & INVOLVEMENT

Algo Group

Chicago, IL, September 2024 – Present

- Participate in weekly pre-professional workshops on systems design, algorithms, and development best practices.

Cross County Captain

Groton, MA

High School Team Captain

September – November 2022

- Led daily practices and weekly meets; mentored younger teammates as the team achieved its best finish in over a decade.

SKILLS

Computer: C, Python, Pandas, NumPy, Scikit-learn, JavaScript, ReactJS, HTML, Git, Linux/UNIX, Windows OS, Excel, Word

Interests/Activities: Sigma Chi Fraternity, Running, Jazz Piano, Classical Music, Premier League Soccer, NBA, Formula 1 Racing