Vivan Sen Das

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EDUCATION

The University of Chicago   Chicago, IL
Bachelor of Science in Computer Science, 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, Systems Programming, 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 bit resizing features to allow for granular control over output and optimized compression

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