Sparsho De | sparsho@uchicago.edu | 803-908-8723 | Chicago, IL

EDUCATION

The University of Chicago — Chicago, IL
M.S in Statistics — June 2025
GPA: 3.85/4.00

The University of Chicago — Chicago, IL
B.S in Mathematics — June 2025
GPA: 3.85/4.00

EXPERIENCE

Susquehanna International Group — Bala Cynwyd, PA
Quantitative Trading Intern — June 2024 – August 2024

- Learned options theory, game theory, and participated in open-outcry mock trading.
- Utilized linear regression and time-series tools to forecast macro event betas on certain trader symbols.

Amazon — Arlington, VA
Software Development Engineer Intern — June 2023 – September 2023

- Designed full stack fintech applications to aid clients with internal transfer pricing using **Java** and **JavaScript**.
- Designed and implemented several **APIs** serving critical business needs. Successfully integrated ICRS data within existing transfer pricing software.
- Wrote robust **unit tests** using **Mockito** and **Junit**.

University of Chicago Dept. of Statistics — Chicago, IL
Grader/Teaching Assistant — March 2023 – Present

- Graded **130+** student homework assignments. Offered constructive feedback and advice in a timely manner.
- Previous classes include Graduate Statistical Inference I-II, Probability Theory, and Real Analysis

University of South Carolina — Columbia, SC
Research Assistant — June 2022 – August 2022

- Focused on problems in computer vision, signal processing, and **millimeter-wave** sensors at an NSF sponsored REU. Successfully identified sleep posture with **~85% accuracy** using commodity mm-Wave devices.
- Wrote **OpenCV**/MATLAB code collecting experiment data, preparing data for training, and implementing algorithms from modern Computer Vision literature.

BAM.money — New York, NY
Software Engineering Intern — March 2022 – June 2022

- Designed and implemented **web-crawlers** collecting open-source financial data and added it to company database.
- Implemented proprietary asset-name and debtor-name similarity algorithms.

PROJECTS

Modeling Darts accuracy with Empirical Bayes

- Extended Tibshirani's 2011 paper *A Statistician plays darts* to an Empirical Bayes perspective using G-modeling.
- Utilized Python, NumPy, and Pandas for numerical integration and optimization.
- Paper can be accessed here and code can be accessed here.

HONORS & AWARDS

Top 500 – Putnam Exam (Rank 352, Top 5%)|3x American Invitational Mathematics Exam Qualifier | 17th place Carnegie Mellon Mathematics and Informatics Contest | 1st place UofSC Math Contest | South Carolina All-State Math Team Captain

SKILLS

Programming Languages: Python, R, Java, DynamoDB
Libraries: NumPy, Pandas