Muthukumar Sundar
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EDUCATION

The University of Chicago Chicago, IL
B.S. Statistics, B.S. Computational and Applied Mathematics Expected, June 2026

- **GPA:** 3.975
- **Certificates:** Financial Markets Program (selective 3-year program with MBA classes and weekly lectures)

EXPERIENCE

Holos, Inc. Madison, WI
Project Intern. Jun 2023 – Sep 2023

- Coded in Unity to develop virtual reality learning spaces for local businesses who taught online courses.
- Utilized project to enable instructors of all kinds to create and monetize their courses in VR.

Milwaukee Tool Milwaukee, WI
Data Analyst Intern Jun 2022 - Sep 2022

- Generated $500k in expected profit by developing an IoT-inspired solution to handle supply chain disruptions.
- Collected >1.2k data points on overseas manufacturers and transportation companies to run data analysis using Pandas and Matplotlib.
- Presented findings on proposed solution to Milwaukee Tools executives.

Rental Property Dashboard Remote
Finance Intern. May 2021 - Sep 2021

- Researched competitive landscape for real estate apps and automated the collection of initial user data reports relating to early marketing efforts to present in weekly meetings.
- Explored ad incorporation into the app and worked to introduce the app's 'Connect' feature.
- Helped organize events and report contact information into spreadsheets to allow managers to speak at events aimed at connecting the LGBTQ+ community with real-estate advisors.

RESEARCH & PROJECTS

West Virginia University Research Assistant | *R, SQL, ShinyApps* | Jun 2024 – Sep 2024 Morgantown, WV

- Analyzed over 10,000 supply chain records from GitHub, covering port data in VA, PA, GA to optimize supply chain forecasting .
- Identified discrepancies between ETA and ATA and researched real-time weather data via web scraping WSJ, and visualized them using ShinyApps.
- Uncovered covariance between weather anomalies and ETA/ATA discrepancies, driving key insights into operational inefficiencies, contributing to a 20% increase in reliability metrics.

Least Squares Monte Carlo Trading Project | *Python* | Jun 2024 – Sep 2024

- Developed a swing options trading strategy using LSMC, simulating 1,000+ price paths to estimate optimal buy and sell signals.
- Performed backtesting over a 5-year period on historical data, achieving a Sharpe ratio of 1.28 by refining entry/exit criteria.
- Applied least squares regression to estimate continuation values, enabling more accurate predictions of swing options profitability.

LEADERSHIP & ACTIVITIES

Maroon Capital Analyst Sept 2023 - Present

- Highly selective quant finance club with rigorous interview process that teaches statistics, asset classes, and financial accounting.
- Designed, implemented, and back-tested statistical arbitrage trading strategy involving mean-reversion trading using fundamental metrics for semi-conductor companies. Ran multi-var regression analysis to develop intrinsic values.

Derivates Group Quant Trading Analyst Sept 2023 - Present

- Education RSO that covers the foundations of statistics & probability, options pricing, financial econometrics, and algorithmic trading.

Chicago Debate Society Sept 2023 - Present

- APDA semi-finalist at George Washington Invitational and Yale Invitational.

SKILLS & INTERESTS

- **Skills:** Python, R, SQL, Excel, PowerPoint
- **Interests:** Soccer, Poker, Carnatic Singing, Hiking, Super Smash Bros.