Sunny (Hanqi) Shi

500 College Ave, Swarthmore, PA 19081 | hshi1@swarthmore.edu | +1 781-492-9545

Education

Swarthmore College — Swarthmore, PA
B.A. in Statistics with minors in Computer Science and Philosophy (GPA: 3.97) — expected May 2027
Relevant coursework: Statistical Learning and Data Mining, Mathematical Statistics I (A+) & II,
Statistical Methods I & II, Competitive Programming, Data Structures and Algorithms (A+); Ongoing:
Social Computing, Empirical Models in Marketing (Graduate Seminar)

Professional Experience

Strategic Investment Intern, Xiaohongshu (RedNote) — Shanghai, China — Jun 2025 - Aug 2025
- Researched applications of AI in digital platforms and consumer hardware; produced 30+ industry briefs for the investment team.
- Evaluated prospective portfolio companies by synthesizing meetings with the founding team and market research into evaluations of product vision, user communities, and team dynamics.
- Supported deal execution by drafting investment memos and due diligence reports.

Research & Project

Statistics Research Assistant, Swarthmore College (GitHub) — Remote & Swarthmore, PA — May 2025 - Present
- Processed search volume data from Google Trends and influenza data from the CDC.
- Developed time-series models predicting weekly influenza hospitalization rates on national and state level with Google Search data using R.
- Implemented cross-validation to select the best model for augmenting data to address insufficient data during COVID.

Mathematics Research Assistant, Swarthmore College (GitHub) — Swarthmore, PA — May 2024 - Aug 2024
- Conducted research on circle packing, an arrangement of infinite tangent circles; extended existing methods to six additional types of packing.
- Programmed in C++ and Python to generate coordinates and radii of circles and tested integers up to 10,000,000.
- Presented findings at the 2025 Joint Mathematics Meetings; co-authoring paper in progress.

Transportation Data Science Project, Northeast Big Data Innovation Hub (GitHub) — Remote — Oct 2024 - Dec 2024
- Applied time-series analysis on motor vehicle collisions in New York City using Python.
- Analyzed collision fatalities by hour of day and recommended methods to improve road safety.

Leadership & Service

Mathematics & Statistics Teaching Assistant, Swarthmore College — Sep 2024 - Present
- 2024-2025 Course: multivariable calculus.
- 2025-2026 Course: statistical methods I & II, probability, and mathematical statistics I & II.

Writing & Speaking Associate, Swarthmore College — Sep 2024 - Present
- Helped students with writing and presentations through one-on-one conferences.
- Presented at the 2025 Mid-Atlantic Writing Centers Association Conference on a qualitative study of international writing tutors and proposals for including more diverse tutors.

Board Member, Swarthmore Gender Minorities in Mathematics & Statistics — Nov 2024 - Present

Treasurer, Swarthmore Club Badminton — Sep 2024 - Present

Honors & Awards

Associate Member, Sigma Xi Scientific Research Honor Society — Nov 2024 - Present
First Place, Tri-College & Extended Region Annual Team Olympics of Math Problem Solving — Feb 2025
The Morris Monsky Prize in Mathematics — May 2024

Additional

Language Skills: English (proficient), Mandarin (native)
Technical Skills: R, Python, C/C++, LaTex, Stata, SQL, Excel,