

Hemang Shankar

732-799-8343 | hshankar1@stevens.edu | [linkedin.com/in/hemang-shankar](https://www.linkedin.com/in/hemang-shankar) | github.com/HemangShankar

EDUCATION

Stevens Institute of Technology - GPA 3.8 / 4.000

Bachelor of Science in Computer Science, Minor in Quantitative Finance

Hoboken, NJ

Expected May 2027

Relevant Coursework: Data Structures, Discrete Structures, Intermediate Statistics, Algorithms, Linear Algebra, Computer Architecture, Principles of Programming (*OCaml*), Systems Programming, Financial Accounting Principles, Vectors & Matrices

Awards: Stevens Global Scholarship, Dean's List (*all semesters*), Coding Hackathon HackCTW (*2nd place*)

AMC 12 (*Top 3*), Susquehanna Intercollegiate NYC Poker Tournament (*1st of 1000, \$1500*), FTC Inspire Award (*FIRST*)

EXPERIENCE

Incoming Code For Good Hackathon Participant

JPMorgan Chase

October 2025

Plano, Texas

Quantitative Fixed Income Research Analyst

Stevens Student Managed Investment Fund

Sept 2024 – Present

Hoboken, NJ

- Leveraged **Ho-Lee** and **BDT models** to analyze fixed income securities and ETFs, strategically optimizing allocations for a **\$1.2M+** student-managed investment portfolio with **12%** enhanced yield
- Implemented strategies, improving portfolio **Sharpe ratio** and **diversification** by **15%** across **100+** securities
- Developed systematic duration-based risk analytics framework, effectively reducing portfolio volatility by **20%**

UI Developer Intern

Aerial View LLC

June 2025 – August 2025

New York, NY

- Developed front-end components using **JavaScript**, **HTML/CSS**, and **React** for a trade surveillance platform analyzing over **1 million trade records** daily, enabling real-time alert review and case management
- Partnered with a 3-person UI team to launch 6+ core features including Primary Display, Trade Viewer, and Sandbox, accelerating compliance workflows and reducing alert investigation time by an estimated **30%**

Laboratory Assistant

Hanlon Financial Center

March. 2025 – Present

Hoboken, NJ

- Engineered a Python-based web backend to dynamically retrieve and process historical financial data (including Bloomberg requests), cutting query times by **35%** and boosting faculty research efficiency
- Administered Linux/Windows systems and maintained Bloomberg terminals in a high-availability lab environment, reducing technical downtime by **50%** and enabling seamless data analytics for 200+ users

Calculus Tutor – Drop-In Tutoring Center

Stevens Institute of Technology

Sept. 2025 – Present

Hoboken, NJ

- Tutored 5 calculus courses (**MA 120–126**), supporting **100+** students in derivatives, integrals, and multivariable calculus
- Improved performance** by breaking down problems, teaching strategies, and reinforcing understanding for students

Undergraduate Research Assistant - Professor Chunlei Qu

Stevens Institute of Technology

Dec. 2023 – Dec 2024

Hoboken, NJ

- Developed and optimized **Hopfield neural networks** in **Python**, improving noisy visual pattern recall by **25%**
- Evaluated **one-shot learning capabilities** in neural networks, contributing to memory-based AI advancements

Software Engineering Intern

Sri Mookambika LLC

May 2024 – Aug 2024

Parsippany, NJ

- Debugged and enhanced **Java applications** to improve speed and scalability, reducing runtime by **20%** and designed relational databases using **MySQL Workbench** and **SQL** for optimized query performance
- Built front-end components with **HTML/CSS**, back-end with **PHP**, and integrated **AWS** for deployment

Undergraduate Research Assistant - Professor Aron Lindberg

Stevens Institute of Technology

Feb 2024 – June 2024

Hoboken, NJ

- Developed and tested **machine learning models** to evaluate creativity and persuasiveness in AI-generated texts
- Analyzed assessment results to improve **human-AI collaborative writing strategies**

PROJECTS

Advanced Portfolio Optimization & Simulation Toolkit | *Python, NumPy, pandas, PyPortfolioOpt* | [Github](#)

Jan 2025

- Optimized stock portfolios with balanced risk and return using Modern Portfolio Theory and the Efficient Frontier
- Calculated metrics (volatility, Sharpe ratio, VaR) and automated rebalancing with historical data
- Enabled backtesting of portfolio strategies to evaluate performance against historical market conditions

Algorithmic Trading Strategy and Performance Visualization | *Python, yfinance, pandas, NumPy* | [Github](#)

Mar 2024

- Developed and implemented a trading strategy with \$100,000 initial capital to maximize profits and minimize risks
- Visualized profit/loss, buy/hold performance, trade markers, and compared Sharpe ratios to evaluate effectiveness

Theater Seating Booking System | *Java* | [Github](#)

Jul 2023

- Built backend Java module to accept API requests to book seats with option to reserve by price or seating location
- Applied advanced data structure concepts of 2D arrays, efficient user input handling, and method calls

TECHNICAL SKILLS

Languages: Python, Java, SQL (Postgres), C/C++, JavaScript, Swift, HTML/CSS, R, Typescript, Go, Bash/Terminal
Frameworks/Libraries: React, TensorFlow, pandas, NumPy, FastAPI, Django, Node.js, OpenCV, Next.js, Scikit-learn
Developer Tools: Git, Docker, Jupyter, Amazon Web Services, Google Cloud Platform, IntelliJ, Jenkins, Kubernetes
Concepts/Tools: Machine Learning, Software Engineering Principles, Data Processing/Science, Object-Oriented Programming, Agile Methodologies, CI/CD Pipelines, Tableau, Power BI, Excel, Computer Vision, Cloud Computing, Database Management Systems

CERTIFICATIONS

Amazon Web Services Specialization: AWS Fundamentals ([Credentials Link](#) - May 31, 2024) - 3 courses
Google Specialization: Google Data Analytics ([Credentials Link](#) - June 18, 2024) - 8 courses
UC San Diego Specialization: Discrete Mathematics for Computer Science ([Credentials Link](#) - May 18, 2024) - 5 courses
Yale University: Financial Markets (with Honors) ([Credentials Link](#) - June 18, 2024)
Bloomberg for Education: Bloomberg Market Concepts ([Credentials Link](#) - December 19, 2024)
J.P. Morgan: Software Engineering Job Simulation ([Credentials Link](#) - July 15, 2025)

LEADERSHIP & VOLUNTEERING

ISSO SEVA <i>Student Volunteer</i> <ul style="list-style-type: none">Organized Diabetes Awareness events and participated in breast cancer walksDonated 70+ food items, 10+ jackets, and school supplies to local shelters and charitiesRecognized by EverLasting Life Foundation for community serviceServed as Fall Festival Coordinator at Reeves-Reed ArboretumVolunteered at Sree Swaminarayan Hindu Temple and Parsippany Police Station	Sep 2019 – Sep 2023 <i>Parsippany, NJ</i>
Parsippany Rockaway Neck Volunteer First Aid Squad <i>EMS Volunteer</i> <ul style="list-style-type: none">Responded to 911 calls with EMTs, assisting with CPR, vitals, and emergency equipment	Oct 2021 – Jun 2022 <i>Parsippany, NJ</i>
American Red Cross <i>Student Volunteer</i> <ul style="list-style-type: none">Organized bake sales, donation drives, and holiday events for the Red Cross ClubCreated Veterans Day cards and read stories to children in the Influential Reader Program	Sep 2019 – Jun 2022 <i>Parsippany, NJ</i>
Metta Welfare Association <i>Student Volunteer</i> <ul style="list-style-type: none">Supported rehabilitation and mobility assistance for elderly patientsHandled administrative and paperwork duties	Aug 2018 <i>Singapore</i>
National Library Board (NLB) <i>Student Volunteer</i> <ul style="list-style-type: none">Assisted with window displays, shelving, and guiding patrons at local libraries	Jan 2018 – Dec 2018 <i>Singapore</i>

INTERESTS

Poker, Tennis (Varsity Singles Player), Travel, Quantitative Strategy Games, FinTech Innovation, Economic History, Aviation Enthusiast