

NIKIL SHYAMSUNDER

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Education

Cornell University, College of Arts & Sciences

Ithaca, NY

Bachelor of Arts in Computer Science and Math

Expected May 2026

- **GPA: 4.231/4.0** | Milstein Scholar in Technology & Humanity

Relevant Coursework: OOP & Data Structures (Java), Analysis of Algorithms, Machine Learning, Functional Programming (OCaml), Computer Organization, Calculus III, Real Analysis, Discrete Math, Linear Algebra

Work Experience

Beacon Platform

New York, NY

Software Engineering Intern, Developer Experience

Jun 2024 — Aug 2024

- Drove 22% reduction in regression test failures across organization by applying data-driven insights with Pandas
- Developed full-stack app in Python for aggregate and timeline views of regression testing and execution metadata
- Engineered heuristic-based triaging and RAG pipeline for root-cause analysis of test failures with AWS Bedrock
- Wrote internal policy enforcing strict merge request gating rules across 6 product teams; presented results to C-Suite

Berryville Institute of Machine Learning

Berryville, VA

Scholar/Intern

Mar 2021 — Oct 2023

- Curated an online annotated bibliography with >150 entries of ML Security research and assisted in literature review
- Achieved critical understanding of both seminal and cutting-edge AI/ML (NLP, Deep Learning, etc.) literature

Stony Brook University Simons Research

Stony Brook, NY

Research Fellow, Department of Geosciences

May 2022 — May 2023

- Architected anomaly detection system in GNSS time-series using novel sliding-window algorithm with NumPy
- Systematically optimized ML architecture and hyperparameters with TensorFlow, achieving F1 score of .98/1

Project Experience

Cornell Autonomous Sailboat Project Team

Ithaca, NY

Software Engineer, Navigation Team

Oct 2023 — Present

- Built Docker images and Sphinx doc-server for 40% faster onboarding and simplified workflow for 12 engineers
- Designed ROS-based system implementation in Python, and engineered transition for 20% runtime efficiency gain

George Mason University, Center for Spatial Information Science and Systems

Fairfax, VA

Research Intern

May 2022 — Sep 2022

- Engineered LSTM-based models in TensorFlow for predicting snowmelt volume using 24-field time-series dataset
- Achieved mean-squared-error of 6.989; integrated model; abstract published in the American Geophysical Union

Leadership & Extracurricular Activities

CS 2800: Mathematics for Computer Science

Ithaca, NY

Teaching Assistant

Aug 2024 — Present

- Lead recitation sessions for 30+ students, delivering targeted instruction and fostering collaborative environment
- Evaluate assignments and exams, providing timely, constructive feedback to enhance student performance

Grub Ventures – Undergraduate Venture Capital Consulting Club

Ithaca, NY

Director of Finance

Sep 2023 — Present

- Interface with administration and source \$1,000s in funds; As business analyst, present due diligence for client firms

Skills

- **Technical:** Python | Java | OCaml | HTML, CSS, JS | SQL | Unix | NumPy | Pandas | TensorFlow | Agile | Git
- **Language:** Spanish (Limited Working Proficiency), Hindi (Novice), Sanskrit (Novice)

Additional Information

Awards: National Merit Scholar | United Way Youth Volunteer of the Year | IEEE Technology Achievement Award, Office of Naval Research Science Award, AFCEA Award for Research at Stony Brook | Virginia State Debate Champion

Interests: Sustainable Living, Snowboarding, The Royal Institution Lectures, *Hardware to Save a Planet* Podcast