

SHAILEN SMITH

shailen.k.smith.gr@dartmouth.edu | (914) 414-5128 | [LinkedIn](#) | [GitHub](#)

EDUCATION

Dartmouth Guarini School of Graduate Studies, Hanover, New Hampshire
Computer Science PhD Student

incoming Fall 2024

Stony Brook University, Stony Brook, New York

Class of 2024

Honors College; B.S. Mathematics; Minor, Computer Science; Minor, Spanish Language and Literature

GPA: **3.92/4**, summa cum laude

Full Tuition Provostial Merit Scholarship (2020-2024); National Merit Scholarship (2020-2024)

Relevant Coursework: Adv. Linear Algebra (MAT315), Systems Administration (CSE311), Scripting Languages (CSE337)

Fairfield Ludlowe High School, Fairfield, Connecticut

Class of 2020

GPA: 3.95/4, *Salutatorian*

RESEARCH

Human Language Analysis Beings Lab, Stony Brook University

Fall 2023 – Spring 2024

- Built a human-aware autoencoder LLM using Hugging Face and PyTorch under Prof. H. Andrew Schwartz
- Wrote senior thesis: "[Autoencoder Human Language Modeling](#)" and presented Honors College Symposium poster

Learning Sciences & Technologies NSF REU ([Grant ID 1950683](#)), Worcester Polytechnic Institute

Summer 2023

- Processed a large student dataset and trained a Bayesian Knowledge Tracing (BKT) model using SQL, Pandas, and scikit-learn
- Developed API to implement BKT model into the ASSISTments tutoring platform for widespread use by schools and researchers

Directed Reading Program in Math, Stony Brook University

Spring 2023

- Studied and implemented feedforward neural networks and Transformers in PyTorch under guidance of a graduate mentor

Data Science NSF REU ([Grant ID 1852498](#)), Worcester Polytechnic Institute

Summer 2022

- Researched the effect of inferred gender information on fair AI ranking algorithms
- Published: A. Pietrick, A. Romportl, S. Smith, O. Olulana, K. Cachel and E. Rundensteiner, "[Are Fair Learning To Rank Models Really Fair? An Analysis Using Inferred Gender](#)," IEEE MIT Undergrad Research Tech Conf (URTC), 2022, pp.1-5.

Directed Reading Program in Math, Stony Brook University

Spring 2022

- Studied category theory and algebraic geometry under guidance of a graduate mentor

EMPLOYMENT

Lead Tutor, Academic Success and Tutoring Center, Stony Brook University

Spring 2021 – Spring 2024

- Mentored 15 tutors with regular written evaluations, constructive training feedback, and community engagement initiatives
- Tutored and prepared undergraduate students for self-regulated learning in calculus, linear algebra, and differential equations

Assistant Center Director, Mathnasium of Fairfield

8/2018 – 1/2023

- Managed and taught individualized math curricula for K-12 students in collaboration with a team of fellow instructors
- Trained fellow instructors in the Mathnasium@Home teaching platform to facilitate virtual transition in Spring 2020

Teaching Assistant, AwesomeMath Summer Program

Summer 2021

- Graded classwork with detailed feedback, led problem sessions, and monitored engagement in online number theory course

COMMUNITY

Treasurer, Stony Brook Environmental Club, Stony Brook University

Fall 2022 – Spring 2024

- Oversaw use of \$3.3k budget with G-Suite and wrote club grant applications for sustainability-focused events

President, Toscanini Hall Council, Stony Brook University

Fall 2021 – Spring 2022

- Led a team of 15 students to plan community events for Toscanini Hall, one of the most engaged dorms on campus
- Recognized as *Outstanding Executive Board Member of the Year* out of 300+ SBU hall council members

Secretary, Stony Brook Chess Club, Stony Brook University

Spring 2021

SKILLS AND INTERESTS

- Computer skills: Python (Hugging Face, PyTorch, Scikit-learn, Pandas), Java, SQL, Shell, Git, Web API Calls, Overleaf, G-Suite
- Mathematics: Vector Spaces, Algorithm Complexity Analysis, Field Extensions, Galois Theory, Manifolds, Logic
- Teaching: [CRLA](#) Level III Certified Tutor (E-learning, accessibility, diversity, tutor management, etc.)
- Research: CITI Certification in Human Subjects in Social/Behavioral Research
- Spanish: Professional working proficiency, completion of minor
- Social Justice: Algorithmic fairness, sustainability and mindful consumption, community engagement
- Chess: Top 5% US Junior (15 years); Piano (15 years); Violin (9 years)
- Learner, communicator, team leader, creative problem solver, educator

SHAILEN SMITH

shailen.k.smith.gr@dartmouth.edu | (914) 414-5128 | [LinkedIn](#) | [GitHub](#)

REFERENCES

Dr. H. Andrew Schwartz

Professor, Stony Brook University Department of Computer Science

Director, Human Language Analysis Lab (HLAB)

Principal Investigator, World Well-Being Project

has@cs.stonybrook.edu

631-632-2459

Professor Schwartz was my faculty mentor for my senior thesis NLP project with the HLAB.

Dr. Neil T. Heffernan

Director, Worcester Polytechnic Institute Learning Sciences and Technologies (LS&T) Program

Co-Founder, The ASSISTments Foundation

nth@wpi.edu

(508) 831-5000 x5569

Professor Heffernan was my faculty mentor during my time at the WPI LS&T REU in Summer 2023.