

Elizabeth Schaefer

EDUCATION

Yale University

Bachelor of Science, Computer Science; Bachelor of Arts, Humanities

GPA: 3.78

New Haven, CT

Aug. 2022 – May 2026

PUBLICATIONS

Schaefer, E. and Roberts, K., “Gender-Neutral Large Language Models for Medical Applications: Reducing Bias in PubMed Abstracts.” *Proceedings of the 24th Workshop on Biomedical Natural Language Processing (BioNLP 2025) at ACL 2025*, pages 114–123.

Schaefer, E., Li, X., Wang, B., Ghiassi, S., Gibbs, K.E., Pai, S.I., Vallabhajosyula, P., Krumholz, H., Schneider, E.B., Cohan, A., Ong, C.S., “Enhancing Complex Surgical Decision-Making with State-of-the-Art Reasoning Models.” Accepted for Oral Presentation at the *21st Annual Academic Surgical Congress (ASC)*, February 2026. Presented by **Schaefer, E.**

Lee, Y., **Schaefer, E.**, Wang, B., Li, X., Butensky, S., Flom, E., Zhou, R., Duffy, A., Gibbs, K., Schneider, E., Cohan, A., Ong, C.S., “Assessing the Reasoning Capabilities of State-of-the-Art Large Language Models in Complex Surgical Decision-Making Following Admission for Inguinal Hernia Repair.” Under review at *SAGES 2026*.

Aguirre, N., Wang, B., **Schaefer, E.**, Huang, J., Li, X., Kolamuri, S.R., Ying, L., Li, X., Ang, S.S., Schneider, E.B., Pai, S.I., Cohan, A., Ong, C.S., “Hippocrates-Karkinos-o1: An Enhanced Model for Oncology Decision Support and Guideline-Aware Reasoning with Self-Refinement and Guideline-Informed Retrieval.” Under review at *NCCN 2026*.

Schaefer, E. and Schaefer, A. J., “Maximizing the Score in “Ticket To Ride”,” 2025. Under third review at *IEEE Transactions on Games*.

EXPERIENCE

NLP Undergraduate Researcher

Yale NLP Lab, Yale University

September 2024 – Present

- Conducting research in the YaleNLP lab under the mentorship of Professor Arman Cohan. Previously worked on retrieval-augmented generation (RAG) for medical question answering, now researching chain-of-thought (CoT) reasoning in large language models for surgical tasks.

Software Engineering Intern

Capital One

June 2025 – August 2025

New York, New York

- 2025 Technology Internship Program; Intelligent Foundations and Experiences team. Used machine learning techniques to create an alerting system for SQL query costs.

Large Language Model Research Intern

McWilliams School of Biomedical Informatics, UTHealth

May 2024 – September 2024

Houston, TX

- Developed a Llama-3.1-405b pipeline to identify and mitigate gender biases in medical training data. Achieved significant improvements in reducing occupational biases within multiple BERT models.

Head Teaching Assistant

Teaching Assistant

CS50, Yale University

May 2024 – January 2025

May 2023 – May 2024

- Led a discussion section of 15+ students and held office hours supporting 30+ students. Headed a team of 40 teaching assistants and coordinated core course logistics.

President

Morse College Council, TYale University

March 2024 – Present

- Manage and allocate funds of \$38,000 while serving as the president of a residential college at Yale. Plan and execute college-wide events, such as formals, trips, and volunteering efforts, for 500+ undergraduates.

Senior Peer Advisor

Department of Computer Science, Yale University

August 2025 – Present

- One of four Yale seniors hired by the department faculty to host weekly office hours advising undergraduate students on coursework, career decisions, and study strategies.

Student Recruitment Coordinator

January 2023 – Present

Yale Admissions

- Collaborate with Yale Admissions officers to enhance prospective and matriculating student experiences; interview and evaluate applicants during the admissions process.

SERVICE

Reviewer, ACL Rolling Review (ARR)

February 2025, May 2025 cycles

Student Organizer, The New England NLP (NENLP) Workshop

April 2025