

Elizabeth Schaefer

713-838-5479 | elizabeth.schaefer@yale.edu | Houston, TX
[linkedin.com/in/elizabethjschaefer/](https://www.linkedin.com/in/elizabethjschaefer/)

EDUCATION

Yale University

Bachelor of Science, Computer Science

GPA: 3.78, In-Major: 3.93

Relevant Coursework: Data Structures and Programming Techniques,
Systems Programming and Computer Organization, Linear Algebra

New Haven, CT

Aug. 2022 – May 2026

EXPERIENCE

Natural Language Processing Research Intern

McWilliams School of Biomedical Informatics, UTHHealth

- Researching and applying machine learning techniques for modern large language models.
- Utilizing artificial intelligence to eliminate biases in medical databases by training Llama-3-70b and BERT models.
- Developing a paper as lead author in collaboration with Dr. Kirk Roberts on these findings. Funded by Grant No. RP210045 from the Cancer Prevention and Research Institute of Texas (CPRIT).

May 2024 – Present

Houston, TX

Head Teaching Assistant

Teaching Assistant

Computer Science 50, Yale University

- Led a discussion section of 15+ students. Clarified and instructed lecture concepts such as algorithms, data structures, resource management, software engineering, and web development.
- Hosted regular office hours of 40+ students. Guided students through solving problem set logic and issues.
- Led a team of 35 other undergraduate teaching assistants as a Head Teaching Assistant.

May 2024 – Present

May 2023 – 2024

President

Morse College Council

- Managed and allocated funds of \$ 35,000+ while serving as the president of a residential college at Yale.
- Planned and executed college-wide events, such as formals, trips, and volunteering efforts, for 500+ undergraduates.

Mar. 2024 – Present

Student Recruitment Coordinator

Yale Admissions

- Collaborated with Yale Admissions officers to enhance prospective and matriculating student experiences, responded to questions from prospective applicants, and organized admissions programming for 1000+ admitted students in Yale's largest and most diverse incoming class.

Jan. 2023 – Present

SELECTED PROJECTS

TeX-like Macro Processor | *Rust, recursion, parsing*

Jan. 2024

- Developed a Rust-based TeX-like macro processor to transform input files by expanding user-defined and built-in macros.
- Implemented macro definitions, conditionals, file inclusions, and delayed expansions. Supported error detection, escape characters, and efficient string handling.

Mini-OS Virtual Memory Management | *C, QEMU, kernel development*

Mar. 2024 – May 2024

- Developed key OS features including process memory isolation, virtual memory management, and system calls.
- Implemented process memory isolation using virtual memory, created independent address spaces for each process, developed fork and exit system calls, and optimized memory usage with shared read-only memory.

Finding the Maximum Score in "Ticket To Ride" | *Julia, graph theory, optimization*

Nov. 2020 - Jun. 2021

- Developed graph-theoretic and mixed-integer programming models to determine the maximum achievable score in the popular board game "Ticket to Ride."
- Created models to calculate optimal solutions with varying numbers of train cars. Analyzed optimal solutions to identify frequently chosen tickets and routes. Provided insights into game balance using optimization techniques.

TECHNICAL SKILLS

Languages: C/C++, Python, Rust, SQL, HTML/CSS, Julia, Racket

Skills: \LaTeX , Linux (Ubuntu), Hugging Face Transformers, NumPy, PyTorch