

WARREN “CHASE” CARSTENSEN IV

Student of Computer Science and Mathematics

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Education

Worcester Polytechnic Institute

Worcester, MA

Dual Bachelors of Science in Mathematical Sciences and Computer Science, 3.94 GPA

August 2022-May 2026

- **Extracurricular Activities:** WPI Jazz Groups
- **Affiliations:** IEEE, SIAM
- **Awards:** Dean's List Fall 2022-Fall 2024, Charles O. Thompson Scholar Designation

Projects

Interactive Qualifying Project

Prague, Czech Republic

Academic - Advisors: Prof. Michael Ginzberg and Prof. Bethel Eddy

October 2024-December 2024

- Project: *Mapping Memories: AI-Powered Geographical Labeling of Historical Testimonies*
- Spent 8 weeks working on site in Prague
- Worked with Post-Bellum, a Czech non-profit which maintains a database of oral histories.
- Collaborated with 3 other WPI students to use large language models (LLMs) such as Gemini and GPT to analyze documents in Post Bellum's database.

WPI Data Science REU

Worcester, MA

Research - Advisor: Prof. Elke Rundensteiner

April 2024-August 2024

- REU Site 2349370, Project: *Applied Artificial Intelligence for Advanced Applications*
- Worked with Ph.D. students Becks Lopez and Avantika Shrestha, and undergraduates Nicholas Small (Providence College) and Janya Bhaskar (University of Colorado, Boulder)
- Conducted research on NLP techniques and LLMs to develop methods for automated depression screening.
- Gained experience in ethical AI, AI interpretability, and data privacy concerns in medical AI applications.
- Designed and implemented data pipelines for open-source LLMs using Python and the Transformers library.
- First author of a research paper presented at the MIT Undergraduate Research Technology Conference.

Experience

Upsilon Pi Epsilon, Massachusetts Alpha

Worcester, MA

Events Coordinator - Advisor: Prof. Craig Wills

January 2025 - Present

- Assisted the Career Officer in planning UPE's annual honor society career fair.
- Planned all organizational events and coordinated member volunteering.

Pi Mu Epsilon, Massachusetts Alpha

Worcester, MA

President - Advisor: Brigitte Servatius

September 2024 - Present

- Led WPI's chapter of the National Mathematics Honors Society, Pi Mu Epsilon
- Rebuilt this dormant organization by restructuring the executive board, improving the application and induction process, and re-establishing campus presence.

WPI Math Department

Worcester, MA

Peer Learning Assistant

August 2023 - Present

- Led weekly discussion periods and held office hours for classes of ~35 students
- Worked a weekly shift in the Math Tutoring Center
- Graded assignments and exams
- Worked with multiple Professors, TAs, and other PLAs for Calculus I, II, and III

Publications

- [1] C. Carstensen, N. Small, J. Bhaskar, B. Lopez, A. Shrestha, and E. Rundensteiner, "MInDS: Using large language models to screen for depression," presented at the MIT Undergraduate Research Technology Conference, Cambridge, Massachusetts: IEEE, Oct. 2024.

Awards

Computing Research Association

Cambridge, MA

Travel Grant

October 2024

- Received funding to travel to and present at the MIT Undergraduate Research Technology Conference