

JULE SCHATZ

(you-la shots) ◇ She/Her/Hers

EDUCATION

University of Michigan, Ann Arbor, Michigan USA

B.S.E., Computer Science Engineering, Minor in Art and Design, 2018

M.S.E., Computer Science, 2020

Ph.D., Computer Science, 2023

AWARDS

Towner Prize Teaching Award, 2022

This award honors engineering GSIs who have demonstrated innovation and excellence in teaching, especially during the COVID-19 pandemic.

Best Poster at University of Michigan DEI Mini-Conference, 2022

Poster Title: Creating a Community-Focused Lab Section in a Large Computer Science Course

Willie Hobbs Moore Aspire, Advance, and Achieve Mentoring Award, 2021

This award honors faculty, staff, and students who demonstrate excellence promoting equity in science, technology, engineering, and math.

Graduate Student Instructor Academic Year Award, 2021

This award recognizes the excellence of our student teachers and are based on anonymous student evaluations and faculty input.

National Science Foundation Graduate Research Fellowship, 2020-2025

TEACHING INTERESTS

Core computer science introductory curricula, artificial intelligence

TEACHING EXPERIENCE

CS 199, Even More Practice (EMP) for CS 128 University of Illinois Urbana-Champaign
Primary Instructor *Spring 2024*

- Started a new add-on course for CS 128 that provides students with additional review and practice in an in-person setting.
- The course meets weekly for 2-hours and involves interactive lecture, a warm up worksheet, and a longer coding activity. Each component was created and developed by me from scratch.
- I have 35 students enrolled who get 1 credit for attending and 50 students coming each week consistently. The extra 15 students are enrolled in CS 128 but do not get credit for coming to EMP but attend anyway.

CS 128, Introduction to Computer Science II University of Illinois Urbana-Champaign
Primary Instructor *Fall 2023, Spring 2024*

- Taught approximately 700 students per semester introductory programming concepts through lecture content, labs, and projects.
- Redesigned lab to involve group work on a 1.5 hour long coding activity. I created 15 of these lab activities for the semester from scratch including starter code, instructions, accompanying slides, test cases, and solutions.
- Implemented a weekly time for students to meet with me. Previously the course had no opportunities for students to meet with the professor.
- In Fall 2023, I created 16 4-5 page worksheets from scratch for students to get extra practice on material.

- In Fall 2023, I hosted bi-weekly in-person study sessions to provide students a space to meet in person and work on practice problems. I had around 20 students come each week.
- Created a new machine problem from scratch that students work on for 2 weeks. This included the starter code, solution, instructions, and a suite of test cases.

EECS 280, Programming and Intro Data Structures
Primary Instructor

University of Michigan
Spring 2022

- Taught approximately 140 students introductory programming concepts through lectures, labs, and projects.
- *Overall, Julie Schatz was an excellent teacher: 4.49/5.0*
- Average rating for women professors in the department 4.07/5.0

EECS 183, Elementary Programming Concepts
Graduate Student Instructor (GSI)

University of Michigan
Fall 2020, Winter 2021

- Designed, created, and taught two new lab sections for students who face barriers due to systemic inequities, such as first generation college students and minoritized students.
- *Overall, Julie Schatz was an excellent teacher: 4.95/5.0*
- Average rating for women GSIs in the department 4.35/5.0

EECS 285, Introduction to Java
Graduate Student Instructor (GSI)

University of Michigan
Fall 2018

- Held office hours to help students master the material.

EECS 492, Introduction to Artificial Intelligence
Undergraduate Instructional Assistant(IA)

University of Michigan
Fall 2017, Winter 2018

- Held office hours, ran a lab section of 30 students, and helped create and grade projects.

EECS 280, Programming and Intro Data Structures
Undergraduate Instructional Assistant(IA)

University of Michigan
Winter 2016, Fall 2016, Winter 2017, Spring 2018

- Held office hours, ran a lab section of 30 students, and helped write exams.

INVITED TALKS

Keynote Speaker at Code Ada Hackathon

University of Illinois Urbana-Champaign

- I gave a 30 min talk on ways to align computer science projects with your values.
- About 100 students attended.

OUTREACH

Dev Ada 2023 - 2024
Judge

University of Illinois Urbana-Champaign
March 2024

- Evaluated eight presentations on semester long team projects developed by students from Women in Computer Science (WCS).

PURE Symposium Poster Judge
Judge

University of Illinois Urbana-Champaign
December 2023

- Evaluated 50+ undergraduate research projects and selected winners.

Women in Computer Science Panel
Organizer and Panel Member

University of Illinois Urbana-Champaign
October 2023

- I organized a panel with 5 panel members (including myself) to answer questions about experiences in computer science from a women's perspective.
- About 20 students from the intro courses attended.

AI4ALL
Instructor

University of Michigan
July 2019, July 2020, July 2021

- AI4ALL is a summer program for diverse high school students that teaches them how to program and implement Artificial Intelligence (AI).
- I created and taught two three-hour lessons on Python and k-means clustering.

High School Computer Science
Classroom Volunteer

Hamtramck Public High School
Fall 2020, Winter 2021

- At Hamtramck High School 97.9% of students are eligible for free or reduced-cost lunch.
- I helped student learn computer science and encouraged them to pursue computer science.

ECSEL+
Social/Mentorship Chair

University of Michigan
August 2018-August 2020

- ECSEL+ is a student organization to support women and other gender minorities pursuing graduate studies in computer science at the University of Michigan.
- I organized social events and developed a mentorship program for incoming ECSEL+ members.

SERVICE

SIGCSE Reviewer 2023 - 2024

- Reviewed 3 potential publications for the Nifty Project track for the SIGCSE conference.

Undergraduate Awards Committee 2023 - 2024

FAIR Appeals Committee 2023 - 2024

- Was a member and chaired around 10 FAIR appeal cases.

RESEARCH INTERESTS

Computer Science Education

I am interested in researching how to make computer science and engineering a more equitable place for all students. This includes studying retention, sense of community, and learning outcomes.

General Artificial Intelligence

I am interested in researching how higher-level thinking works in the human mind and how that can be applied to computer systems.

PUBLICATIONS

Schatz, J. (2023). Schatz, J. (2023). Cognitive Modeling of Aggregate and Individual Performance on the Remote Associates Test (Doctoral dissertation).

Schatz, J., Jones, S. J., & Laird, J. E. (2022). Modeling the Remote Associates Test as Retrievals from Semantic Memory. *Cognitive Science*, 46(6), e13145

Schatz, J., Makki, Z., Kloosterman, J., Levesque, E., Rypkema, H. (2022). Creating a Community-Focused Lab Section in a Large Computer Science Course (Experience), 2022 ASEE Annual Conference Exposition.

Schatz, J., Jones, S. J., & Laird, J. E. (2018). An Architecture Approach to Modeling the Remote Associates Test, Proceedings of the 16th International Conference on Cognitive Modelling (ICCM). Madison, WI.