Rijul Jain

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Education

<u>Williams College</u>, Williamstown, MA, USA | 2021-2025
- BA Computer Science and English; GPA: 3.99/4.0
- Coursework: Independent Research in Computer Science, Principles of Prog. Lang., Algorithms, Computer Organization, Data Structures, Mathematical/Computational Approaches to Social Justice (research course)

<u>University of Oxford</u>, Oxford, UK | 2023-2024 academic year
- Visiting student at Exeter College as part of the Williams-Exeter Programme at Oxford
- Coursework: Models of Computation, Data Visualization, Compilers

Experience

<u>Microsoft Research</u> (Redmond, WA), *Undergraduate Research Intern* (Summer 2024)
- Researching end-user trust and verifiability of AI-augmented programming systems at Microsoft Research Redmond
- Working with Prof. Shan Lu and Dr. Sarah Fakhoury as part of MSR's Undergraduate Research Internship in Computing program

<u>Carnegie Mellon University Software and Societal Systems Department</u>, *Research Intern* (Summer 2023)
- Researched domain-specific program generation with large language models for diagram authoring with Penrose, a text-to-diagram platform
- Worked with Profs. Joshua Sunshine and Keenan Crane as part of CMU's Research Experiences for Undergraduates in Software Engineering (REUSE) program
- Achieved 96% compile rate for LLM-generated programs; presented poster at SPLASH 2023 and short paper at PLATEAU 2024

<u>Williams College Department of Computer Science</u>, *Summer Research Intern* (Summer 2022)
- Partially modeled the Unix filesystem with an intermediate representation by writing a programming language in C++ using systematically tested and safe POSIX system calls (BitFridge, under Professor Daniel Barowy)
- Cataloged unexpected system call behavior by probing 100 million inputs each with fuzzers written in C

<u>Williams College Department of Mathematics</u>, *Research Assistant* (Fall 2021 - Spring 2022)
- Compiled dataset of 2200+ musicians by scraping 30 websites' data to analyze gender and racial diversity in US professional orchestras under Professor Chad Topaz using R and HTML/CSS knowledge

<u>Stanford University, Center for Computer Research in Music and Acoustics</u>, *Intern* (Summer 2020)
- Updated website code for FAUST (Functional Audio Stream) programming language using HTML/CSS

Skills/Interests - programming languages and software engineering, human-computer interaction, artificial intelligence, human-centered design, cognitive psychology, cognitive literary science, Victorian literature, literary criticism and theory, research.