Siddharth Parmar

(734) 645-0466 | sidpar@umich.edu | https://s-par.github.io/Portfolio-Website | Citizenship: US Citizen

Education

University of Michigan — Ann Arbor, MI

Bachelor of Science in Computer Science — *Aug. 2020 – May 2024*

GPA: 3.933/4.0 | Activities and Societies: LSA Honors

Relevant Coursework: Web Systems, Introduction to Computer Security, Data Structures and Algorithms, Introduction to Computer Organization, Applied Computational Machine Learning for Scientists & Engineers, Discrete Math, and Introduction to Statistics and Data Analysis

Experience

Instructional Aide — Theory of Computation — Aug. 2022 – Present

University of Michigan College of Engineering — *Ann Arbor, MI*

- Assisted teaching 700+ students per semester algorithm design, dynamic programming, automata, Turing Machines, computability, complexity classes (e.g. P, NP, NP-Hard), and cryptography
- Wrote and evaluated exams and led office hours to guide students

Software Engineer Intern — May 2022 – Aug. 2022

LearningClues — *Ann Arbor, MI*

- Enhanced course data scraping from Canvas LMS to improve performance and refine the output and scope of analyzed content to power NSF-funded study tools
- Crafted powerful parsing scripts to analyze and filter necessary information from files and websites into JSON files
- Aided a shift in the backend to an AWS Lambda-backed infrastructure

Student Researcher — Oct. 2021 – Apr. 2022

University of Michigan (LearningClues) — *Ann Arbor, MI*

- Extracted and filtered course data from Canvas LMS using Python to aid the development of NSF-funded educational tools reliant on up-to-date course content
- Organized focus groups, with dedicated interviews with students, to ascertain student preferences and needs regarding optimal study tools to guide the development process
- Crafted an award-winning presentation summarizing the status of the project, future pathways, and work already completed

Projects

BGS MUN Website | *HTML, CSS, TailwindCSS, Git/Github*

- Built a responsive mobile-friendly website for a Model United Nations event at BGS National Public School
- Developed website from scratch using HTML for the basic structure augmented by TailwindCSS classes for a modern design and mobile-friendly responsiveness

Content-Aware Image Resize | *C++*

- Implemented a program that used smart seam carving according to mathematical formulas to dynamically resize a given image
- Utilized pointers for memory preservation along with dynamic memory

Achievements

U-M Undergraduadute Research Opportunity Program (UROP) Blue Ribbon Award — Apr. 2022

- Awarded for an outstanding presentation about the status and future pathways of my research project at the UROP symposium

William J. Branstrom Freshman Prize — Mar. 2021

- Awarded to first-term freshmen who rank in the upper five percent of their class within their school or college

Technical Skills

Languages: C++, Python, JavaScript, HTML, CSS
Frameworks and Concepts: React, Node.js, Flask, Hadoop, REST APIs, Amazon Web Services (AWS)
Developer Tools: Git, Vim, VS Code, XCode, PyCharm