

# SREELAKSHMI S B

**Location:** Ann Arbor, MI

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## EDUCATION

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### University of Michigan, Ann Arbor, MI

Master of Science in Human-Computer Interaction.

August 2022 – May 2024 (expected)

### Birla Institute of Technology and Science, Pilani, India

Bachelor of Engineering in Computer Science

August 2015 – June 2019

## EXPERIENCE

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### Graduate Student Instructor | University of Michigan

August 2023 – Present

- Part of the teaching team for SI 507 (graduate course on Python Programming), and SI 539 (graduate course on Web Design)
- Designing course content, creating and grading assignments, and teaching multiple discussion sections of over 50 students each.

### Graduate Research Assistant | University of Michigan

January 2023 – December 2023

- Designed a platform that enables educators to find research partners with similar interests, incorporating over 30 methods.
- Interviewed members of the academia, identified key pains and design opportunities, designed interfaces for a web-based tool with a target audience of over 2 million.

### Web Designer | Michigan Institute for Data Science

May 2023 – August 2023

- Redesigned and maintained the website used by the Michigan Institute for Data Science (MIDAS). Used WordPress for content management and HTML, CSS and JavaScript to incorporate new design features.

### UX Designer | Dearborn Public Health

May 2023 – August 2023

- Worked as part of the Dearborn Public Health Department to design and develop a Public Health Dashboard to address Dearborn residents' information needs (population: 100k+).
- Conducted stakeholder interviews, peer research, and literature reviews to understand requirements, found data points to address those requirements.

### UX Designer | Ginsberg Center

May 2023 – June 2023

- Worked with a community organization, 'Black Men Read', to design and develop communication materials (website and social media content) to improve the organization's outreach and spread the message of promoting diversity in literature.

### UX Researcher | MathWorks

July 2020 – June 2022

- Led UX Initiatives for 3 major tools within the MATLAB and SIMULINK suite of products (Variant Manager for SIMULINK, Clone Detector App in SIMULINK, and MATLAB Support Package for Raspberry Pi hardware).
- Conducted 50+ usability tests, PURE studies, and customer interviews to isolate issues and trends, and drive design decisions.
- Spearheaded UX Research initiatives to design and ship a new support package in SIMULINK R2022b (called Variant Manager) by conducting user interviews, working with the designer to organize multiple design sprints and prototype solutions, and running usability tests. Improved the efficiency of the tool by creating a new design that could run models up to 60x faster.
- Designed 4 new APIs for the Clone Detector App in SIMULINK.
- Introduced several usability enhancements in the Clone Detector App and reduced reported usability issues by 75%.

### Software Engineer | MathWorks

January 2019 – June 2020

- Collaborated with teams across the company on **Software Development** projects.
- Developed features in Variant Code Generation and the Build infrastructure of the company.
- Developed a tool that aids in the unit testing of Simulink features by generating an exhaustive list of block combinations for a given block type, along with friendly hooks for traditional exploratory testing methods to use it.
- Developed a responsive web-based tool to track issues in MATLAB Central. Tracked and resolved ~300 issues per month.
- Periodically acted as a team lead for solving customer issues, leading teams of 25-30 members.

### Development Intern | Defence Research and Development Organization

June 2018 – July 2018

- Developed a GUI-based tool for analysis of Underwater Sensor Network (UWSN) performance using Python.
- The tool gave a visual representation of the footprints around the nodes for a better understanding of the behaviour of UWSN during simulation/actual operation.

- Designed an Online Georeferencing Tool
- Built a Web implementation of the geo-referencing function of QGIS software.

## PROJECTS

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### Designing a SMART Music Teacher

August 2023 - December 2023

Designed a [Smart Music Teacher System](#), using IoT, to help users learn to play an instrument, more efficiently, by addressing issues with traditional learning methods. Conducted surveys and diary studies, developed user enactment scenarios, conducted experience prototyping sessions, designed, and demoed the system using various IoT components.

### Designing a Language Learning tool using AR/VR

August 2023 - December 2023

Designed two versions of a tool that provides immersive language learning experiences using AR and VR. Conducted market research, created 360 sketches and physical prototypes, used Bezi and Unity to prototype the tool in VR, and Lens Studio to prototype in AR.

### Developing a Pixel Painter Application using React

October 2023 - November 2023

Developed a [tool for drawing Pixel Art](#), with a React-based frontend. The tool features a color palette, drawing tools, a canvas with resizable pixels, a color picker and basic animation controls.

### Designing immersive digital experiences for college sports | UX Designer at RELIC

January 2023 - April 2023

Worked with RELIC, an NFT startup, to research and design interactive virtual experiences, using Spatial, for college football fans.

### Improving the Permit Application process in Dearborn | UX Consultant at DAC

January 2023 - April 2023

Worked with the Dearborn Administrative Center (DAC) to research and design a digital interface that allows the public to complete and track permit applications online, in the city of Dearborn. Conducted user interviews, created high-fidelity prototypes, and ran usability tests.

### Evaluating an Interactive Shopping Recommendation Engine | Usability Analyst at PerfectRec

January 2023 – April 2023

Assessed the usability of the 'PerfectRec' recommendation engine that generates ML-powered recommendations for consumer products. Analyzed the information architecture of the site, conducted heuristic analysis, ran usability tests, and recommended product improvements and potential new features.

### Improving the Visitor Management system at Dearborn | UX Consultant at DAC

October 2022 - November 2022

Partnered with the City of Dearborn to evaluate and revamp the Visitor Management Platform at the Dearborn Administrative Center (DAC). Ran usability tests and designed new interfaces. Reduced the check-in time, to avail services, by 50%.

### Promoting civic engagement in Lansing, Michigan | UX Consultant at CADL

September 2022 - December 2022

Partnered with the City of Lansing and the Capital Area District Library (CADL) to improve civic engagement in Lansing through research, design, and prototyping of government information tools. Increased Citizen Engagement in Lansing public records by 85%.

### Designing the digital shared space of U-M ADVANCE | UX Researcher at U-M ADVANCE

September 2022 - December 2022

Collaborated with a team to redesign the digital workspace used by the U-M Advance program at University of Michigan. Conducted user interviews, created affinity maps, designed solutions to organize 20 years' worth of data and over 200k documents.

### Developing An emotional Text to Speech Converter

August 2018 – December 2018

Built a text-to-speech converter that calculates the emotional context of a text and modulates the artificially generated speech to convey the same emotions.

### Analysis of Complex Brain Networks

August 2017 – December 2017

Studied the organization of functional and structural brain systems and their alterations in the case of Alzheimer's patients, using Graph Theory and Network Science.

## SKILLS

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- **UX Methodologies:** Contextual Inquiry, Persona and Scenario creation, Competitive Research, Survey Design, Diary Studies, User Testing, Tree testing, Qualitative and Quantitative Data Analysis, Heuristic Evaluation, Journey Mapping, Information Architecture, Card Sorting, Wireframing, Prototyping, UX Design, Interaction Design, UI Design, Responsive Web design
- **Tools:** Qualtrics XM, UserZoom, Optimal Workshop, Maze, Figma, Adobe CS, Adobe XD, Adobe Photoshop, Adobe Illustrator, Adobe After Effects, Adobe Aero, Unity, MS Visual Studio, Git, GCC, Vim, GDB, Power BI, AutoCAD, Wing IDE, Qt Creator
- **Programming Languages/Frameworks:** Python, SQL, HTML, CSS, JavaScript (React), MATLAB, C++, C, Java, R