

# Vaibhav Sen Malla

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## Education

### University of Michigan

M.S. in Information | GPA: 3.91/4.00

Ann Arbor, MI

Expected: May 2026

### Pennsylvania State University

B.S. in Information Sciences & Technology (Software Design & Development track)

University Park, PA

Graduated: Dec 2020

**Courses (university/online):** Harvard's CS50x | Harvard's Intro to AI in Python | Data Structures & Algorithms Distributed Systems | Graph Theory | Statistics & Data Analysis | Princeton's Algorithms II Course | Network Architecture Full-Stack Web Development Bootcamp | UC San Diego's Interaction Design | Georgia Tech's AI, Ethics, & Society

## Skills

**Languages:** Python, Java, HTML/CSS/JavaScript, TypeScript, SQL, R

**Technologies:** React.js, Node.js, Express.js, MongoDB, AWS, Azure, Google Cloud, Docker, Jenkins, Linux, Bash, Git

## Experience

### Software Engineer II

Ericsson

Boise, ID

Dec 2021 – Apr 2024

- Built, released, and maintained the NetCloud Exchange platform (a 5G-optimized SD-WAN product)
- Revamped Makefiles and Docker containers to enhance building and testing workflows of NCX
- Led core data migration project to AWS, successfully managed extensive multi-team code refactoring
- Automated pipelines for AWS/Azure deployment and AMI sharing using Python, Jenkins, and Docker
- Achieved a 94% reduction in processing time for 5-hour tasks from the implemented automations
- Established as go-to expert for NetCloud Exchange's monthly new version deployment plans to PROD

### Web Developer

Virufy

Remote

Sept 2020 – Oct 2020

- Built the company website using JavaScript and set up rapid deployment workflow through Netlify
- Collaborated with product designers and UI/UX team to implement UI changes in an agile environment
- Delivered faster load times by using techniques like image compression to improve user experience
- Analyzed user activity using heatmaps and Google Analytics to enhance the site's SEO
- Reduced user bounce rate by applying data-driven strategies and increased site traffic by 30%

### Co-Founder & Product Manager

Gage Ventures

University Park, PA

Feb 2020 – July 2020

- EdTech startup developing behavior-tracking tools to assist teachers/parents of children with ADHD
- Led planning of software architecture and UX design, ensuring alignment with target user preferences
- Directed development of MVP to rapidly test and validate product concepts (in React Native/Node.js)
- Selected for Penn State's Startup Accelerator Program (Summer Founders) securing \$15,000 in funding

### HCI Research Assistant

Penn State's College of Information Sciences & Technology

University Park, PA

May 2019 – May 2020

- Collaborated with PhD researchers on 4 projects for the Human-Computer Interaction research program
- Primarily assisted the Visual Cortex on Silicon project, aiming to use AR, computer vision, and haptic prosthetics to help visually impaired people navigate in their daily lives
- Conducted user studies and usability tests on the prosthetics in scenario-based environments such as grocery shopping
- Designed wireframes and 2 high-fidelity prototypes using Adobe XD and Figma for A/B testing and project proposals

## Projects

### Hermes

- Messenger app with Google/Facebook authentication made with React.js, Firebase, and Chat Engine

Sept 2021

### Super Mario World - Google Maps

- Themed version of Google Maps made using Maps JavaScript API from the Google Cloud Platform

Apr 2021

### eFinance - Personal Financing App

- Built using Java with JUnit for test-driven development. Authored functional requirements documents

Dec 2020

### Alan AI News Assistant

- Conversational voice-controlled news app made with React.js and Alan AI speech recognition platform

July 2020