Vaibhay Sen Malla

vsmalla@umich.edu linkedin.com/in/vaibhav-malla github.com/vxm52

Education

University of Michigan

Ann Arbor, MI M.S. in Information (Data Science track) | GPA: 3.91/4.00 Expected: May 2026

Pennsylvania State University

B.S. in Information Sciences & Technology (Software Design & Development track) Graduated: Dec 2020

Relevant Coursework & Certifications:

Harvard's CS50x | Intro to AI with Python (Harvard) | Princeton Algorithms II | Georgia Tech's AI, Ethics, & Society Applied Machine Learning | Information Retrieval | Network Analysis | Data Structures & Algorithms | Probability & Statistics Linear Algebra & Calculus | Discrete Math | Distributed Systems | Data Analysis & Manipulation | Full-Stack Web Development

Skills

Languages & Frameworks: Python, R, SQL, Java, TypeScript, JavaScript, HTML/CSS, Node.js, React

AI/ML & Data Tools: Pandas, NumPy, Scikit-learn, NLP, Supabase

Cloud & DevOps: AWS, Azure, GCP, Docker, Jenkins, Linux, Bash, Git, Netlify, Cursor, Lovable

Experience

Software Engineer II

Ericsson Dec 2021 - Apr 2024

- · Built, released, and maintained the NetCloud Exchange platform, a 5G-optimized SD-WAN solution
- Led a high-priority cross-team AWS data migration project, delivered 50% ahead of schedule; authored 1000+ refactored LOC
- Revamped Makefiles and Docker containers, reducing build time and cutting test failures by 75%
- Automated CI/CD pipelines for AWS/Azure deployment and AMI sharing using Python, Jenkins, and Docker
- Reduced deployment processing time from 5 hours to 18 minutes (94% time savings) from the implemented automations
- Served as the go-to engineer for planning, deploying, and documenting monthly PROD releases of NetCloud Exchange

Software Engineer New York, NY

Contractor.AI

Gage Ventures

May 2025 - August 2025

- Built and deployed a secure, maintainable contractor registry tool using TypeScript, React, and Lovable AI
- Designed and implemented a Supabase SQL database schema enabling contractor data retrieval with <200ms query latency
- Collaborated closely with designers to implement UI/UX changes in a fast-paced agile setting
- Analyzed user activity using heatmaps and Google Analytics to boost the landing page's SEO and user engagement
- · Leveraged foundation models and AI tools (Cursor, Lovable) to accelerate coding, debugging, and deployment workflows

Co-Founder & Product Manager

University Park, PA Feb 2020 - July 2020

University Park, PA

Boise, ID

· EdTech startup building behavior-tracking tools for parents and teachers of children with ADHD

- Led product design, software architecture, and user research to shape MVP features and UX
- Directed development of MVP using React Native and Node is to test product-market fit
- Selected into Penn State's Startup Accelerator (Summer Founders Program), securing \$15,000 in funding

HCI Research Assistant University Park, PA

Penn State's College of Information Sciences & Technology

May 2019 - May 2020

- Collaborated with PhD researchers on 4 projects within the Human-Computer Interaction program
- Contributed to "Visual Cortex on Silicon" project, using AR, computer vision, and haptics to aid visually impaired navigation
- Conducted usability testing of the haptic prosthetics and scenario-based user studies (e.g., grocery store navigation)
- Designed wireframes and interactive prototypes in Figma and Adobe XD for A/B testing and publications

Projects

Al Commit Generator June 2025

· CLI tool that analyzes git diffs using LLMs and generates meaningful commit messages, improving developers' Git workflow

Wireflow May 2025

Converts wireframes or screenshots of UI into responsive React/JSX code using GPT-4 Vision models

Soccer Goals Analysis & Prediction

Dec 2024

Performed EDA and built a linear regression model on Cristiano Ronaldo's goal data to forecast future goal types