

Vaibhav Sen Malla

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Education and Skills

University of Michigan - Ann Arbor

Master of Science (MS) in Data Science

Ann Arbor, MI

Expected grad: 2026

Pennsylvania State University

Bachelor of Science (BS) in Information Sciences and Technology (Software Design & Development track)

University Park, PA

Graduated: 2020

Major GPA: 3.67 | Dean's List, Gamma Tau Phi Honors Society

Extra Online Courses: Harvard's CS50x | Harvard's Intro to Artificial Intelligence in Python | Princeton's Algorithms Course
Full-Stack Web Development Bootcamp | Complete Python Bootcamp | Network Architecture Course
UC San Diego's Data Structures and Algorithms Course | UC San Diego's Graph Theory
Interaction Design: Designing, Running, and Analyzing Experiments | Georgia Tech's AI, Ethics, and Society

Technical Skills:

Programming Languages: Python, Java, JavaScript, HTML, CSS, SQL

Frameworks/Software: MongoDB, Express.js, React, Node.js, SASS, Scrum, Linux, Git, Bash, Figma, Docker, Jenkins, AWS, Azure

Professional Experience

Software Engineer II, (Cradlepoint)

Cradlepoint (acquired by Ericsson), a cloud-managed wireless edge-networking technology company

Boise, ID

Dec 2021 - May 2024

- Built, released, and maintained the NetCloud Exchange platform (a 5G-optimized SD-WAN product)
- 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)

Volunteer-run project building a global AI database of crowdsourced cough audio recordings to identify COVID-19

Remote

Sept 2020 - Oct 2020

- Built and managed the company website. Analyzed user activity using heatmaps and Google Analytics
- Collaborated with product designers and UI/UX team to implement UI changes in an agile environment
- Optimized site performance, improved SEO, and increased site traffic by 20%

Co-founder & Product Manager, (Gage Ventures)

Startup co-founded with 4 other members mentored at Penn State's Startup Accelerator Program

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, UX design, and development of MVP using React Native/Node.js
- Received \$15,000 in funding from the Summer Founders program (top 6 teams out of 46)

HCI Research Assistant, (Pennsylvania State University)

Penn State's College of Information Sciences and 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 usability tests on the prosthetics in scenario-based environments such as grocery shopping
- Designed 2 high-fidelity prototypes using Adobe XD and Figma for project proposals
- Conducted user studies for the PhamilyHealth project (a photo-sharing system to facilitate family health & wellness collaboration and communication)

Recent Projects

Hermes

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

July 2021 - Sept 2021

Super Mario World - Google Maps

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

Mar 2021 - Apr 2021

Keeper Notes App

- Personal to-do list app built with React.js (frontend) and Node.js, Express.js, and MongoDB for backend

Feb 2021 - Mar 2021

eFinance - Personal Financing App (team project)

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

Sept 2020 - Dec 2020

Alan AI News Assistant

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

July 2020 - Aug 2020