Vaibhav Sen Malla

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Education

University of Michigan <div align="right">**Ann Arbor, MI**</div>
M.S. in Information | GPA: 3.91/4.00 <div align="right">*Expected: May 2026*</div>

Pennsylvania State University <div align="right">**University Park, PA**</div>
B.S. in Information Sciences & Technology (Software Design & Development track) <div align="right">*Graduated: Dec 2020*</div>

Courses (university/online): Harvard's CS50x | Harvard's Intro to AI in Python | Data Structures & Algorithms | Discrete Math
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 <div align="right">**Boise, ID**</div>
Ericsson <div align="right">*Dec 2021 – Apr 2024*</div>
- 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 <div align="right">**Remote**</div>
Virufy <div align="right">*Sept 2020 – Oct 2020*</div>
- 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 <div align="right">**University Park, PA**</div>
Gage Ventures <div align="right">*Feb 2020 – July 2020*</div>
- 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 <div align="right">**University Park, PA**</div>
Penn State's College of Information Sciences & Technology <div align="right">*May 2019 – May 2020*</div>
- 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 <div align="right">*Sept 2021*</div>
- Messenger app with Google/Facebook authentication made with React.js, Firebase, and Chat Engine

Super Mario World - Google Maps <div align="right">*Apr 2021*</div>
- Themed version of Google Maps made using Maps JavaScript API from the Google Cloud Platform

eFinance - Personal Financing App <div align="right">*Dec 2020*</div>
- Built using Java with JUnit for test-driven development. Authored functional requirements documents

Alan AI News Assistant <div align="right">*July 2020*</div>
- Conversational voice-controlled news app made with React.js and Alan AI speech recognition platform