Vaibhay Sen Malla

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Education

M.S. in Data Science

University of Michigan Ann Arbor, MI

University Park, PA

Pennsylvania State University

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

• GPA: 3.67/4.00 | Awards: Dean's List, Gamma Tau Phi Honor's Society

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

Experience

Ericsson Boise, ID Software Engineer II 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

Virufy Remote Web Developer 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%

Gage Ventures University Park, PA

Co-Founder & Product Manager

- 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) receiving \$15,000 in funding

Penn State's College of Information Sciences & Technology

University Park, PA May 2019 - May 2020

Feb 2020 - July 2020

Expected: May 2026

Graduated: Dec 2020

HCI Research Assistant · 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 Sept 2021

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

Super Mario World - Google Maps Apr 2021

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

Dec 2020 eFinance - Personal Financing App

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

Alan Al News Assistant July 2020

· Conversational voice-controlled news app made with React is and Alan Al speech recognition platform

Skills

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

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