# Varun Narayanswamy

# Fullstack Engineer

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## PROFESSIONAL SUMMARY

I am a Software Engineer with over three years of experience as a full-stack engineer. I hold a Master's degree in Human-Computer Interaction and Design from the University of Washington. I am passionate about working on user-facing technology that increase functionality, accessibility, and delight.

## WORK EXPERIENCE

## **Research Assistant**

Paul G. Allen School of Computer Science | March '24 - August '24

- Make4All Lab Advised by Jennifer Mankoff
- Designed student-focused platform prototype using Figma and visualization development to improve GPA by habit tracking and actionable suggestions.
- Conducted qualitative research study to understand the application value and potential concerns.

## **Software Engineer Contractor**

Vitals Matter | March 2023 - August 2023

 Developed backend architecture with MySQL authentication, designed web interfaces in Figma, and researched health-tracking wearables to futureproof a mobile application for at-risk populations.

# Software Engineer II

Seagate Technology | August 2020 - September 2022

- Led fullstack development using Vue.js, HTML, CSS, JavaScript, Typescipt, and Node.js for data management/security.
- Enhanced frontend features to improve user efficiency, restructured microservice backend to double cloud efficiency, and integrated MongoDB for optimized data storage.
- Co-developed Selenium test framework with 100+ tests, fixing hundreds of bugs pre-production and ensuring robust deployment.

# **SELECTED PROJECTS**

# Visualizing Wellness

Visualization of the <u>GLOBEM</u> Dataset

 Parsed 6 years of UW student mental health, physical states and activity data. Developed visualization using Vegalite that assisted in gleaning actionable insights.

#### **Project Tightrope**

Interactive Education Experience Regard the Physical/Mental Experience of Anxiety

- Designed/developed Multiplayer walk-up-and-play style videogame. Players
  use a balancing board controller and rod to dodge/collect negative and
  positive orbs, or wing controllers to move orbs towards player one.
- Led software and hardware development and contributed to ideation, testing, and refinement.

#### HeartbeatChecker

iOS Mobile Application for easy and Accessible Heartbeat Checking

• iOS Mobile app that uses photoplethysmography, the Swift AVFoundations video recording, and iPhone flashlight to check the heart rate.

## **EDUCATION**

# **University of Washington**

MS in Human Computer Interaction + Design

- Class of 2024 | Seattle, WA
- **GPA**: 3.91

# University of Colorado, Boulder

BS in Creative Technology + Design

- Class of 2020 | Boulder, CO
- Minors: Applied Math, Computer Science
- **GPA**: 3.68

#### SKILLS AND EXPERTISE

# **Software Development:**

Languages:

JavaScript, Typescript, Vue.js, Python, Swift, HTML, CSS, Node.js MakeCode, React.js, Vegalite,

• Software and Tools:

GitHub, Gitlab, GitHub Pages, Postman, Docker, Google Cloud, S3, Kubernetes, Jenkins, OAuth 2.0, MySQL, gRPC, MongoDB

Skills:

Data Visualization, Frontend Dev, API Route Dev, Frontend Testing, UI/UX Principles

## **Prototyping and Design:**

Digital:

Figma, InDesign, Photoshop, Logic, CapCut, iMovie

Physical:

Adafruit CPX, laser cutting, 3D Printing, Soldering, Rhinoceros

## **User Research:**

 Usability Testing, Contextual Inquiry, Affinity Mapping, Thematic Analysis

# **HONORS & ACTIVITIES**

**Boy Scouts of America** Troup 78 Boulder, CO