## VAIBHAV ACHUTHANANDA

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#### **EDUCATION**

### Stevens Institute of Technology | Hoboken, NJ

Expected 05/2026

Master of Science, Computer Science Honors: Provost Master's Scholar

Relevant Coursework: Mathematical Foundations of Machine Learning, Algorithms, and Fundamentals of Computing

#### Lovely Professional University | Punjab, India

09/2019 - 06/2023

Bachelor of Technology, Computer Science and Engineering

Honors: LPUNEST Scholar

Relevant Coursework: Operating Systems, Artificial Intelligence, Computer Networks, Database Management Systems, Software Project Management, Discrete Mathematics, and Computer Organization and Design

## **SKILLS**

Programming Languages: C, C+++, Python, Java, JavaScript, TypeScript, Svelte, Swift, and Golang

**Frameworks/Technologies:** Node.js, Next.js, Three.js, Vite.js, React, SvelteKit, SwiftUI, MySQL, Firebase, Google Cloud, Docker, Kubernetes, TensorFlow, RESTful API design, and CI/CD pipelines.

Software: Adobe Photoshop and Illustrator, Final Cut Pro, MS Word, Excel, Notion, Obsidian, Excalidraw, Figma, and Slack

## RELEVANT EXPERIENCE

Mohit Mokal Mediation, Bengaluru, India (Freelance | Full-Stack Developer)

01/2024 - 08/2024

- Developed an intuitive, user-friendly website using React, Framer Motion, and Tailwind CSS to streamline startup management, completed ahead of schedule within a two-month timeframe.
- Implemented version control with Git and leveraged Firebase to enable rapid prototyping, cutting development iterations in half and reducing server costs by 100%, optimizing budget allocation.
- Integrated the Blogger API to automate blog content updates, improving content freshness and user engagement by 30%.

#### **BSides**, Indore, India (Freelance | Software Engineer)

06/2023 - 07/2023

- Led comprehensive research on problem areas, thoroughly analyzing system flow, data utilization, and workflow processes, leading to a 25% increase in system efficiency.
- Collaborated closely with a Full-Stack Developer to meticulously review and align over 30 user requirements, ensuring optimal performance criteria and improving overall system reliability by 20%.
- Orchestrated strategic planning and effectively managed deliverables for more than 20 short-term sprints, maintaining a 100% on-time delivery rate.

# **ACADEMIC PROJECTS**

BrainChime, Capstone Project (github.com/codebhav/Brainchime)

01/2023 - 06/2023

- Conducted in-depth research on existing assistive technology (AT) solutions for individuals with cognitive and mental disabilities, identifying key areas for enhancement..
- Pioneered the development of an advanced CNN model for emotion detection and classification, utilizing ARSCNFaceGeometry to construct SCNNodes for each detected face anchor, improving recognition accuracy by 25%.
- Devised comprehensive work instructions for three innovative software features built with UIKit and ARKit, aligning with project goals and enhancing user interactivity.

#### **ACHIEVEMENTS**

- Presented capstone thesis at the 7th International Joint Conference on Computing Sciences. (ICCS-2023).
- Top 4 at the India Tour of Open-Source Punjab Edition Hackathon.
- Top 6 All India at the CTF organized by BIT Mesra, India.
- Operations Lead at Google Developer Student Clubs
- Represented university at the North Zone Inter University Chess Men Championship.