# SAHIL MURHEKAR

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#### PROFESSIONAL EXPERIENCE

# PREZITEC HEALTH PVT. LTD. Deep Learning Intern

Vellore, India Jul 24 - Jan 25

- Engineered deep learning image processing pipeline generating marketing insights across 3 projects, improving customer segmentation and campaign effectiveness
- Designed user interface for SONAR injection systems, reducing staff training requirements by 40% and increasing operational efficiency
- Enhanced product performance metrics through technical improvements, increasing needle precision by 30% and accuracy by 25%
- Restructured quality control protocols resulting in 50% reduction in manufacturing defects and improved product reliability

#### 24BUY7 Web Developer Intern

Mumbai, India Jun 24 - Jul 24

- Developed full-stack applications using Figma, Framer, HTML, CSS, JavaScript, reducing development timelines by 30%
- Enhanced website for cross-platform compatibility, driving 40% increase in mobile user engagement metrics
- Created automated contact system generating 40% growth in customer inquiry conversion rate

# **SKILLS**

PROGRAMMING: Python, Java, SQL, C, C++.

BIG DATA TOOLS: Hadoop, Hive, Spark, MongoDB, MySQL, Hbase, Cassandra.

WEB DEVELOPMENT: Figma, Framer, HTML, CSS, JS, ExpressJS, NodeJS, React, Astro, Tailwind, Flask, Django, JWT, Socket.io. DATA SCIENCE: OpenCV, Mediapipe, Matplotlib, Seaborn, Pandas, Numpy, Scikit-learn, Pytorch, Tensorflow, PowerBI, Nltk, LLMs, Statistics

OTHERS: Arduino, ESP32, Git, Github, Linux, Vercel, Railway, Netlify.

#### **PROJECTS**

## VisibleVoice.AI - Smart Sign Language Detector (<u>Github</u>)

- Engineered sign language recognition application using Django, OpenCV, and MediaPipe with 95% accuracy rate
- Integrated Google Gemini API and Google Text-to-Speech for intelligent multilingual feedback
- Crafted real-time video interface with gesture controls, attracting 100+ weekly active users
- Established caching and refined session management, reducing page load times by 60%

# INTERVIEW PREP AI – AI-POWERED INTERVIEW COACHING PLATFORM (LINK) (GITHUB)

- Built an interview prep tool using Streamlit and Gemini API with RAG-enhanced contextual tweaking.
- Generated five tailored interview questions based on user resume context.
- Implemented automated answer evaluation with structured feedback and scoring (out of 10).
- Enabled resume upload with semantic parsing for resume-specific queries, powered by LLM.
- Increased user engagement and completion rates by 40% with a responsive, tab-based UI.

### HIRECREST - JOB RECRUITMENT WEB APPLICATION (LINK) (GITHUB)

- Architected comprehensive recruitment platform connecting employers with candidates through matching algorithms
- Deployed automated skill assessment features reducing screening time by 35% for hiring managers
- Created machine learning models for role-candidate compatibility scoring with 87% accuracy rate
- Integrated with third-party HR systems, increasing application processing efficiency by 55%

# **PUBLICATIONS**

Optimizing Power Supply with AI-Predicted Demand for IoT and Machine Devices (Link)

# **EDUCATION**

#### VELLORE INSTITUTE OF TECHNOLOGY

Bachelors in Information Technology

Vellore, India 2022-2026

CGPA: 8.86

- Completed advanced coursework in Programming, Data Structures and Algorithms, Database Management Systems, Operating Systems, Computer Networks, Information Security
- Selected for competitive research program collaborating with faculty on machine learning applications
- Served as Tech-Operations Lead and Vice-Chairman for TAM-VIT, organizing 30+ Artificial Intelligence and Machine Learning workshops for 100+ participants

#### **CERTIFICATIONS & ACHIEVEMENTS**

- Finalist in CATerpillar Code-a-thon 2024, demonstrating advanced technical capabilities
- Technical team lead evaluating 50+ hackathon projects across multiple competitions
- NASBA Certified SOL Developer (Certificate)