Aradhye Swarup 10th: 96.4% | 12th: 93.4% | CGPA: 8.62

Hyderabad, India | +91 9212104828 | aradhye.swarup@gmail.com | linkedin | github | leetcode

PROFESSIONAL SUMMARY

Full-stack developer and AI engineer who builds production applications serving real users. Led end-to-end development of voice cloning systems, blockchain IDEs, and automated content processing pipelines that cut manual review time by 70%. Created projects like nahneed. platform with 50+ active users and founded startup that reached finals in university competitions.

SKILLS & TECHNOLOGIES

Languages: C, C++, Python, Java, HTML, CSS, JavaScript, TypeScript, SQL, noSQL

Technologies & Tools: React.js, Next.js, TailwindCSS, Node.js, Django, FastAPI, Express.js, MongoDB

DevOps and Toolkits: Git, AWS, Docker, Kubernetes, Azure Cloud

Machine Learning Libraries: Numpy, Pandas, Seaborn, Scikit-learn, R, MATLAB

EXPERIENCE

Software Developer Intern | algoleap | Website

May 2025 - July 2025

- Built AI pipeline using Deepgram and Together.AI, reducing manual video review time by 70% for 200+ internal videos.
- Developed modular workflows with prompt-tuned summarization and CSV export, processing 15+ hours weekly with 95% accuracy.
- Redesigned UML architecture for internal tools, improving maintainability and reducing technical debt by 40%.
- Delivered technical presentation on rapid AI prototyping tools and iteration strategies to engineering team.

Founder | *nahneed.* | *Website*

January 2025 - May 2025

- Founded creative technology platform combining full-stack development with AI-powered storytelling experiences.
- Scaled blurt. from 0 to 50+ users in 1 month, launched version 2.0 and learned software maintenance practices.
- Led product, design, and marketing; grew social media to 100+ followers with 15% weekly engagement.
- Advanced to final round at Pioniera startup convention, competing against teams from top universities.

PROJECTS

Echoid | Next.is, FastAPI, XTTS-v2, Torch, Bun, Uvicorn, Soundfile, NumPy | Website | Github

June 2025

- Built production-ready voice synthesis platform with emotion-aware speech generation featuring 8 distinct tone variations, processing audio input in under 3 seconds with 92% voice similarity accuracy.
- Deployed complete on-premise TTS stack supporting real-time voice cloning, eliminating \$200+ monthly API costs for developers.
- Engineered custom voice models without cloud dependencies, enabling fully customizable voice synthesis.
- Hosted frontend on S3 and backend on EC2 using CloudFormation for infrastructure as code, ensuring scalable and reproducible deployments.

Fortify | MERN, Solidity, Hardhat, Python, Streamlit, FastAPI, Passport.js, WebAssembly | Github

April 2025

- Designed full-stack Solidity IDE integrating ML-powered vulnerability detection with real-time contract compilation, reducing development cycle time by 60%.
- Developed custom compiler pipeliné achieving sub-500ms contract compilation and deployment across Ethereum testnets.
- Integrated OAuth authentication and multi-language support, supporting contract deployment across 6 programming environments with seamless blockchain deployment.

EvoPacts | MERN, Solidity, Truffle, Web3.js, Flask, PyTorch, Scikit-learn, Plotly | Github

September 2023

- Architected blockchain-based contract management platform using smart contracts and predictive ML models to revolutionize athlete-club agreement handling.
- Implemented automated execution with real-time performance analytics, ensuring 100% transparent and tamper-proof agreement processing.
- Engineered comprehensive platform combining blockchain technology, machine learning analytics, and secure payment systems for sports industry applications.

EDUCATION

BTech in Computer Science and Engineering (CSE) | *Vellore Institute of Technology, Vellore*

September 2022 - May 2026

CGPA: 8.62. Relevant coursework: Data Structures & Algorithms, Design & Analysis of Algorithms, Theory of Computation,
Discrete Mathematics, and Database Management Systems.

ACHIEVEMENTS & CERTIFICATIONS

MLOps for Generative AI | *Google* | *Certificate*

May 2025

LeetCode | Solved 100+ problems across core DSA topics.

April 2025

Pioneira Finalist | *E-Cell's startup convention with nahneed. among 70+ teams.*

March 2025 Julv 2024

OCI 2024 Generative AI Professional | Oracle | Certificate | HackBattle Finalist | IEEE's 36-hour hackathon with 100 teams.

September 2023

The Complete 2023 WebDev Bootcamp | *Udemy* | *Certificate*

June 2023

EXTRA-CURRICULAR

Motion Graphics Head | *Indian Society for Technical Education*

April 2024 - May 2025

- Led a 10+ member team, ensuring content quality and smooth project execution.
- Trained members in After Effects, improving team skills by 70%.
- Coordinated two monthly events with 1,500+ participants, increasing domain engagement by 150%.