Andhavarapu Balu

4th year, B.Tech. Computer Science and Engineering

VIT University

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GitHub/JustTheCoolest

CGPA: 9.00

Codeforces Rating: 1500 (approx.)

ACHIEVEMENTS

- 1. FOSSIT'24 Hackathon winning team (intercollege): Git application into a different industry
- 2. Paradox CTF winning team out of around 200 individual participants (intercollege)
- 3. GDSC Code Quest coding contest rank 3 out of 130 participants
- 4. Byte Battles coding contest team rank 2 out of 97 individual participants
- 5. Finalists at TechnoXian World Robotics Championship: Fastest line follower contest
- 6. HackerOne Quora: Identified a bug that compromised user privacy. Was awarded \$100 as bug bounty.
- 7. Best Delegate in BVMG MUN 2021
- 8. Google Code to Learn 2016 Finalist
- 9. ASSET Talent Scholar Gold: ASSET Talent Scholar in 2017, ASSET Talent Scholar Gold in 2018
 - 3 times monthly topper in AQAD (ASSET Question A Day)

PROJECTS

- 1. **E-Resources Chrome Extension for VITC Central Library (just released):** Official Chrome extension by the library, to provide access to research papers for faculty, research scholars and students.
 - 185+ users within first 3 days of release
 - Javascript
- **2. TeamBooks (in-progress):** A set of websites and apps for an NGO to conduct a physical book donation drive. Objectives: Show information to people, automate workflow for volunteers, collect data
 - Flutter, Firebase
- **3. Terminal UI app for "Colour of Life" short film:** A frontend-only app that simulates interactions with an AI agent (main character) in the film.
 - Rust, Ratatui.rs
- **4. Timetable to calendar converter for VIT students:** Converts timetable into calendar importable format. Enables students to coordinate with their other timetables, and to receive notifications.
 - · Python, ICS files, Streamlit.py
- 5. Natural Language based Image Editing software: Using Gemini API, Streamlit, PIL
- 6. GodMode browser: Coded integrations to more providers in this open-source AI chat browser
- 7. PDF Category Splitter: GUI tool to assign tags to each page of a PDF and create new filtered PDFs by tag.

 Made for an NGO to split their chronological list of events into various categories like education, healthcare, etc.
 - Vibe coded

- 8. Team Atom Robotics: Coded and tested in the physical world Arduino embedded robots
 - Arduino C++, PID algorithm
- 9. **Covid Care Teens (NGO):** Helped victims of COVID-19 by making the Discord bot that accessed information from a Government website using their API, and displayed it in an interactive form to users
 - Python, TN Government's API, Discord API, async, assert
- 10. **SongLink Discord bot:** When a song is sent in a group chat, automatically gives other members the option to open a song in the service they like
 - Python, Discord API, SongLink API, json responses
- **11. Team Atom Robotics:** Created a drone programming simulator that will help programmers get introduced to robotics
- 12. Stock Analyser: API with Flask
- **13. YouTube channel**: Sharing my developing knowledge and challenging others with puzzles https://www.youtube.com/@baluandhavarapu

Publications

- Balu, A., et al. (2025). Smart Watch based Integration System for Habituating Face Paralysis Monitoring.
 Published as Use Case 25, Healthcare Category, Al for Good Innovate For Impact Report 2025 (early release) (pp. 138–141).
- 2. Chapter on Explainable AI in Healthcare: Almost accepted for publication

Skills

- 1. Neat Coding: Abstracting to functions, reducing redundancy, minimising coupling, structuring branches, etc.
- **2.** Java | Collections framework
- **3.** C/C++ | unix threads and semaphores
- 4. Python | API requests, asynchronous programming and unit testing
- 5. Scikit | Currently learning in Machine Learning course in college
- 6. GitHub
- 7. Linux terminal
- 8. SQL and PL-SQL | integration of Python with MySQL and Oracle
- 9. HTML, CSS, Javascript, React | Exposed to Electron
- 10. AWS EC2, S3, hosted Steamlit application
- 11. Keras NLP explored | Tokenizer, preprocessor, backend, compile, fit, predict, evaluate
- 12. MATLAB
- 13. Verilog
- **14. Robotics:** Game development using MIT Scratch, building and coding robots (with sensors and motors) using Lego, using sensors to analyze the environment, introductory level MIT **App Inventor**
- 15. Assembly: x86, x51, ARM
- **16. MS Office (and Google Workspace):** Word, PowerPoint, Forms, Excel.
- 17. Spoken languages: English, Telugu, Tamil, Hindi, intermediate French, basic German

EXPERIENCES

- 1. Programming Team Lead at Atom Robotics, VIT Chennai
- 2. Technical department member at Linux Users Group (lugvitc), VIT Chennai

- 3. Projects Programmer at Students for the Exploration and Development of Space (SEDS Antariksh chapter), VIT Chennai
- 4. Web Developer at Microsoft Innovations Club, VIT Chennai
- 5. Open Source Programmer at Google Developers Group (GDG), VIT Chennai
- 6. Technical department member at ACM student chapter, VIT Chennai

TRAINING INTERNSHIPS (EXTERNSHIPS)

- 1. Generative Al Applications using Vertex Al by Smartinternz (75 hours) and Google (75 hours) July 2024
 - Vertex AI badge with all labs and courses completed on Google Cloud Skillboost
- 2. Entrepreneurship and Skill Development with Letter of Recommendation from internship at Mindler Education February 2022

MORE

- 1. Taught friends and juniors dozens of times via Discord and Teams meetings
- 2. Presentation to exchange students representing Atom Robotics, at VIT Chennai
- 3. Speeches to school students via VNest outreach program, at two independent occasions