

# Charukesh G.R

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[linkedin.com](https://www.linkedin.com) | [github.com](https://github.com) | [leetcode.com](https://leetcode.com)

## PROFILE

B.Tech student in Information Technology at VIT Vellore (CGPA: 9.71/10), with a strong focus on data structures and algorithms, backend development, and machine learning. Proficient in C++ and Python, with hands-on experience in building AI models and full-stack web applications. Daily practice of 30 minutes of competitive coding to sharpen algorithmic thinking and to focus more on building scalable systems for real-world problems.

## EDUCATION

### Vellore Institute of Technology

*B.Tech in Information Technology; CGPA: 9.71*

Vellore, India

*Aug 2023 - Aug 2027*

### Chinmaya Vidyalaya (CBSE)

*Class 12: 97%, Class 10: 98.6%*

Chennai, India

*Jun 2009 - Mar 2023*

## PROJECTS

### Waste Classification Model | *TensorFlow, OpenCV, CUDA, Python*

[GitHub](#)

- Built a real-time waste classification model using SSD MobileNet V2 with 92% accuracy on a custom dataset.
- Processed 3,000+ annotated images using OpenCV; optimized training with CUDA/cuDNN for 3× faster training
- Created TFRecord pipelines and labeling tools, improving data preparation time by 20%.
- Role: ML Developer – led model training, tuning, and deployment pipeline setup.

### CodeHint Assistant – Chrome Extension | *JavaScript, Node.js, HTML, CSS, Gemini API*

[GitHub](#)

- Built a Chrome Extension used by 100+ users to inject AI-powered hints directly into LeetCode problem pages.
- Implemented DOM-based context detection across 500+ LeetCode problems to deliver targeted suggestions.
- Handled 200+ hint requests through a secure Node.js backend with Gemini API for real-time streaming.
- Role: Full Stack Developer - developed core logic across popup UI and background scripts in a 2-person team.

### AquaLearn | *React Native, Expo.js, Gemini API*

[GitHub](#)

- Built a React Native mobile app for water hygiene awareness in a 4-member team.
- Designed 4 learning modules with 10 questions each, including interactive quizzes and contextual chatbot support.
- Developed 10+ reusable UI components to ensure visual consistency across screens.
- Role: Frontend Developer - led interface development and AI integration during a 3-day sprint.

## TECHNICAL SKILLS

**Languages:** C, C++, Python, Java, JavaScript, HTML, CSS

**Core Skills:** Data Structures and Algorithms, Object-Oriented Programming, Operating Systems, DBMS

**Frameworks & Libraries:** TensorFlow, React

**Tools & Platforms:** Node.js, Git, GitHub, Visual Studio Code, MySQL, Jupyter Notebook

## HACKATHONS

### Yantra Central Hack

*Frontend Developer (Flutter)*

- Built responsive UI screens for waste classification app
- Collaborated with backend and ML teams

### Internal Hackathon

*AI/UX Designer*

- Integrated Gemini AI chatbot into AquaLearn
- Designed user interface screens using Figma

## LANGUAGES

Telugu (Native), English (Fluent), Tamil (Fluent), Hindi (Fluent)