



Venkata Rithish Reddy Chamala

Bachelor of Technology
in Computer Science and Engineering
Indian Institute of Technology, Ropar

+91-9182281125
rithishreddychamala@gmail.com
GitHub | **LinkedIn**
Leetcode | **CodeForces**

EDUCATION

Degree	Institute/Board	CGPA/Percentage	Year
Bachelor of Technology	Indian Institute of Technology, Ropar	8.37 (Till 6th Sem)	2023-2027
Senior Secondary	Central Board of Secondary Education	94.2%	2023
Secondary	Andhra Pradesh Board of Secondary Education	100%	2021

EXPERIENCE

- **Google** May 2026 – Aug 2026
Software Engineering Intern Google-Ananta, Bangalore, India
 - Designed and engineered a distributed batch pipeline to automatically expire and revoke fine-grained account permissions between YouTube and Google Ads, enforcing least privilege and data security protocols at scale.
 - Developed event-driven Asynchronous processors to establish automatic, implicit account linking between YouTube and Google Ads whenever a product from Google Merchant Center (GMC) is tagged in a YouTube video.
 - Identified and resolved a concurrency bug in production asynchronous processors by implementing real-time database state validation prior to execution, ensuring data integrity across decoupled services.

PROJECTS

- **Leave and Travel Management System** Jan 2026–May 2026
Next.js, Express.js, Prisma ORM, PostgreSQL, Nginx, Keycloak SSO GitHub
 - Built and deployed at IIT Ropar, enabling institute staff to submit, track, and approve leave and travel requests through a centralized, role-based digital workflow, replacing manual paper processes.
 - Engineered an extensible framework enabling code-free workflow creation, with configurable multi-level approvals, acting-role delegation, OTP + Google OAuth authentication, and automated PDF generation.
 - Enabled admins to monitor real-time analytics, security events, audit logs, per-workflow comment visibility, ensuring full operational transparency across every approval stage.
- **Optimal Route Managing System** Jan 2026–May 2026
Data Structures and Algorithms course project under Dr.Anil Shukla GitHub
 - Used A* Search and Red-Black Trees to find optimal paths in strongly connected graphs using real-time traffic data.
 - Simulated live traffic conditions via random weight updates for route cost.
 - Added collaborative features like ‘Avoided Route’ for improved user configurability.
- **CourseXP - Gamified LTI Learning Tool** Jan 2026–May 2026
MongoDB, Express.js, React, Node.js, TypeScript, LTI 1.3 GitHub
 - Built a full-stack gamification platform that integrates into any LMS (Canvas, Moodle) via LTI 1.3, allowing students to earn Brownie Points for on-time submissions, course milestones, and peer help sessions without requiring a separate login.
 - Engineered an automated point system using cron jobs and webhooks to track deadlines and course progress, updating balances atomically with idempotency guards to prevent duplicate awards.
 - Built a Brownie point based peer-help marketplace for 1-on-1 doubt sessions, secured the LTI launch flow using RS256 JWT verification, and a dynamic registry supporting new LMS platforms without code changes.

TECHNICAL SKILLS

- **Programming Languages:** C++, Java, Python, SQL, C, JavaScript, HTML, CSS, Prolog, Scheme.
- **Technologies:** React, Node, Express, Git, MongoDB, PostgreSQL, LTI 1.3, Keycloak SSO, Google Colab, Docker, Protocol Buffers, RISC-V.

KEY COURSES TAKEN

- **CS & AI:** Machine Learning, Artificial Neural Networks, Data Structures and Algorithms, Operating Systems, Computer Architecture, Software Development, Computer Networks, Database Management Systems, Digital Logic Design, Design and Analysis of Algorithms, Theory of Computation
- **Maths:** Discrete Mathematics, Probability and Statistics, Advanced Calculus, Linear Algebra, Differential Equations

POSITIONS OF RESPONSIBILITY

- **Session Cooridnator**, Fitness Club, Board of Wellness Affairs (BOWA), IIT Ropar July.2024 - May. 2025
- **Organising team member**, Corporate Connect 3.0, CDPC, IIT Ropar May.2025 - May.2025

MISCELLANEOUS

- **Jee Advanced**, AIR 1667 2023
- **JEE Mains**, AIR 2106, with 100% in Physics. 2023
- **DSA Tutor at SkillTurtle**, Taught students how to approach and solve weekly LeetCode contest problems. 2026
- **AlgoUniversity Tech Fellowship**, Selected among top 2% of 20,000+ candidates for the final interview round. 2024
- **Codeforces Expert**, Max Rating: 1619 , Solved 440+ problems 2026
- **Achieved Global Rank 725**, in Codeforces Div 3 contest among 30k+ participants. [Rank List] 2026