

K R Druva

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EDUCATION

PES University, Bengaluru

Jun 2022 – Jun 2026

B.Tech in Computer Science and Engineering

Relevant Coursework: Data Structures & Algorithms, Computer Networks, Operating Systems, Database Systems, Object-Oriented Programming, Cloud Computing

EXPERIENCE

Zemblance Hydrocarbons – IIT Madras (Remote)

May 2025 – Jul 2025

AI/ML Intern – Energy Industry

- Prototyped and benchmarked AI models for power demand forecasting using real-world datasets
- Collaborated with professors, engineers, and PhD researchers across domains
- Analyzed confidential energy data ensuring zero data leaks
- Built a product that visualizes stress-strain plots from uploaded data and predicts the point of material failure

Kodivian Technologies

May 2025 – Jul 2025

Product Developer Intern

- Built core backend for internal low-code/no-code platform used by enterprise clients
- Deployed SCANIFY, reducing document processing time by **60%** via intelligent parsing
- Designed scalable Python APIs and optimized SQLite queries for multi-user workflows
- Worked on confidential product pipelines under NDA

Centre for Computer Network and Security, Bengaluru

Jun 2024 – Aug 2024

Research Intern

- Built malware detector with 94% accuracy using static + heuristic analysis
- Trained XGBoost and Random Forest classifiers on 1.2K malware samples
- Presented paper at APIT 2025 as Sole Indian delegate

IEEE PES University Student Branch

Jun 2023 – Present

Technical Head

- Led team of 8 for Kalpana 2023/24 hackathon with over 300+ national participants
- Designed challenges and co-managed deployment for 5 cybersecurity challenges/CTFs, ensuring 99.9% uptime
- Improved participant engagement by 40% via robust technical feedback loops

PROJECTS

ChainCitadel — Decentralized Voting System

2025

- Built Solidity smart contracts with 100% test coverage to ensure election integrity
- Implemented ERC-721 based voter authentication to significantly reduce unauthorized access and improve voter verification
- Reduced gas fees by 35% through optimized smart contract design

Emotion-Driven Storyteller

2025

- Built narration pipeline using RoBERTa and DistilBERT achieving 91% sentiment accuracy
- Reduced latency to sub-2s and memory usage by 45% using FastAPI and caching
- Supported 5 voice personas via ElevenLabs API

SKILLS

Languages: Python, JavaScript, TypeScript, SQL, Bash

Frameworks: React, Node.js, Express.js, FastAPI

Databases: MongoDB, MySQL, SQLite

Tools: Git, Docker, AWS, VIM, Linux

Security: Malware Analysis, Network Security

AWARDS & ACHIEVEMENTS

- Runner-Up at Kalpana 2022 — IEEE's national hackathon with 250+ teams
- Top 10 finisher in Thunder Cipher CTF 2023 among 180+ teams
- Global Top 2% rank on TryHackMe cybersecurity platform

HACKATHONS & COMPETITIONS

- Confluence (PESU) — Built AI accessibility tool for visually impaired
- TechXcelerate (BITS Pilani) — Built blockchain supply chain validator