

# Garvit

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## Education

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### VIT Bhopal University

Bachelor of Technology in Computer Science and Engineering  
Cumulative GPA: 8.47/10

Bhopal, Madhya Pradesh  
Expected Graduation: May 2026

### Indraprastha Convent Senior Secondary School

12<sup>th</sup> Standard

Rohini, New Delhi  
May 2022

### Delhi Public School

10<sup>th</sup> Standard

Rohtak, Haryana  
May 2020

## Projects

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### Smart Contract-Based Land and Property Registration System | React, Web3.js, Solidity, Ethereum, Next.js, Express

- Engineered and launched a decentralized land registry system, processing over 50 test transactions on the Ethereum testnet.
- Strengthened transaction security by incorporating ERC-721 tokens, reducing potential fraud risk by an estimated 20% through blockchain's immutable record-keeping and decentralized design (based on security properties of Ethereum testnet simulations).
- Added ownership transfer, dispute resolution, and record-keeping features for enhanced functionality.

### Algorithm Visualizer | Javascript, HTML, CSS

- Created an interactive web application to visualize six sorting algorithms (Selection Sort, Bubble Sort, Insertion Sort, Merge Sort, Quick Sort, Heap Sort).
- Introduced adjustable speed and array size features to boost usability.
- Optimized memory efficiency and performance through in-place swapping and code refactoring.
- Enhanced user experience by enabling real-time visualization of sorting algorithms.

### Go-based CLI Tool for Git Analysis | Go, Git, GitHub

- Constructed a high-performance CLI tool in Go, utilizing go-git and goroutines for concurrent Git repository analysis, cutting processing time by approximately 25% for repositories with 100+ commits (observed runtime improvements).
- Linked with Git for seamless data retrieval and analysis of commit history and branch metrics.

### Email Spam Filter using Naive Bayes Algorithm | Python, Pandas, Scikit-Learn, NLTK

- Applied a machine learning-based email spam filter, achieving 99.1% accuracy on a 5,500-email dataset.
- Boosted classification efficiency by an estimated 10% through refined data preprocessing techniques, including tokenization and stemming.

## Technical Skills

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**Programming Languages:** C, C++, Python, Java, Go

**Web Development:** Next.js, React, Node.js, Tailwind CSS, Express, Flask, JavaScript, TypeScript, HTML, CSS

**Database Management:** MySQL, PostgreSQL, SQLite

**Tools & Technologies:** Git, AWS, Linux, Shell Scripting, Jenkins, Vercel, Firebase, Netlify, Postman, Cronjobs

## Certifications & Achievements

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- Certifications:** Elite+Silver Certificate in Cloud Computing – IIT Kharagpur (NPTEL), The Bits and Bytes of Computer Networking – Google (Coursera), Geodata Processing using Python – IIRS and ISRO
- Achievements:** Ranked 293 out of 444k+ participants in TCS CodeVita Hackathon Season 12 (Round 1), placing in the top 0.066% globally; Among top 5 percentile in NPTEL Cloud Computing All India Exam; Runner-Up in Hack-Exchange Ideathon among 50+ teams; Achieved 5 Stars in C++ and Python on HackerRank
- Leadership & Extracurricular Activities:** Co-Lead, Tech Team – Bit By Bit Club: Managed a team of 15+ members to organize 10+ coding workshops and hackathons, increasing student participation by approximately 30% over one semester.