

# Sarthak Thapliyal

+91-7895364210 | [sarthakthapliyal007@gmail.com](mailto:sarthakthapliyal007@gmail.com) | [linkedin.com/in/sarthakthapliyal](https://linkedin.com/in/sarthakthapliyal)

## EDUCATION

### Graphic Era Hill University

Bachelor of Technology in Computer Science & Engineering (Specialization in AI/ML)

Dehradun, Uttarakhand

Aug. 2023 – Present

- Relevant Coursework: Object-Oriented Programming, Databases, Data Structures and Algorithms, Operating Systems, Computer Networks, Machine Learning

### Army Public School

Class XII - 71.6%

Dehradun, Uttarakhand

2022

### Army Public School

Class X - 83.2%

Dehradun, Uttarakhand

2020

## TECHNICAL SKILLS

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

**Frameworks & Libraries:** TensorFlow, Keras, PyTorch, Scikit-learn, Pandas, NumPy, OpenCV, NLTK

**Databases:** MongoDB, MySQL

**Tools & Platforms:** Git, OpenAI API, Matplotlib

## PROJECTS

### AI Chess Bot | Python, Chess Engine, Minimax Algorithm

2025

- Developed an AI-powered chess engine in Python leveraging the python-chess library for real-time interactive gameplay.
- Implemented minimax algorithm with heuristic evaluation functions for intelligent move selection.
- Designed state management logic to track gameplay and ensure optimal performance.

### Phishing Website & Email Detector | Python, NLP, Machine Learning

2025

- Built a machine learning-based phishing detection system in Python to identify malicious URLs and fraudulent emails.
- Implemented URL feature extraction, email header parsing, and NLP-based content classification.
- Achieved improved detection accuracy by applying supervised learning models and feature engineering techniques.

### Docker Lite | C, Containers, OS Concepts

2025

- Implemented a minimal containerization system replicating core Docker functionalities such as process isolation and filesystem layering.
- Built namespace and cgroup based isolation from scratch in C to understand low-level container mechanics.
- Developed a lightweight image format and CLI tool enabling container build and run operations.

## CERTIFICATIONS & CODING PROFILES

### Mastering Data Structures & Algorithms using C and C++

Online

Instructor: Abdul Bari (60 hours)

**LeetCode:** Solved 200+ problems in C++ covering data structures and algorithms.

**Competitive Programming:** Active participant in weekly LeetCode contests and CodeForces Div-I/II rounds.