# Ishita Srivastava

+91-9555711193 | 20cs3034@rgipt.ac.in | <u>LinkedIn</u> | <u>GitHub</u>

### EDUCATION

### Rajiv Gandhi Institute of Petroleum Technology

Jais, UP

(An Institution of National Importance along the lines of IITs)

Bachelor of Technology in Computer Science and Engineering; CPI: 8.91\*

Dec 2020 - Jun 2024

Carmel School

Gorakhpur, Uttar Pradesh

Matriculation, ICSE, 2018: 95.3% & Intermediate, ISC, 2020: 93.4%

## Completed Projects

• Copyright Infringement detector | Won The Smart India Hackathon 2022 — GitHub

Aug 2022

- A blockchain-based record of the platforms with publishing rights of media. Media is stored using IPFS.
- o Designed a Web Crawler that analyses the browser results for downloading movies and extracts all the redirect links using RegEX and BeautifulSoup. OCR has been used to detect the download options on the website.

• Technology Stack: Blockchain, Selenium, Solidity, Ethereum, Nodejs, Reactjs, PUPPETEER, PyTesseract for OCR, HTML Parser using BeutifulSoup.

- Querying system for NFTs | Smart Contracts for transaction, GraphQL for indexing <u>GitHub</u> Nov 2022
  - Deployed a Smart Contract using Hardhat framework that performs the transaction and returns its address.
  - Querying through the address by the use of **The Graph API**.
  - o **Technology Stack:** Solidity, Web3.js, Nodejs, Polygon, The Graph, Openzeppelin, ERC721.
- Two-player game | Socket Programming, Client-Server Communication GitHub

Dec 2022

- Developed a Tic-Tac-Toe game using the **client-server** model wherein the moves of clients in the Game-room are communicated using **sockets** enabling it to work on different devices connected to the same network.
- o Technology Stack: Vuejs, Socket.io, Nodejs.

## Ongoing Projects

• Blockchain in Healthcare System | Blockchain, Cryptography — Accepted in IEEE

Sep 2022

- Secured storage and dynamically permissioned access of the medical records using smart card and **Proof-of-Authority** on Permissioned-Blockchain.
- Using Lattice-based Cryptography to make the system secure against quantum attacks.
- Technology Stack: SHA256 hashing algorithm, Public-Key Cryptography, P2P Network, Smart Card, Proof-of-Authority consensus algorithm (Hyperledger Fabric).
- Cryptographic Messaging Application on the IPFS | FileCoin Virtual Machine

Jan 2023

- $\circ$  Led a team of 5 developers to build a secure messaging decentralized application with IAM and Time control.
- Upgraded the security using Lattice Cryptography to make the decentralized application resistant to quantum attacks.
- o Technology Stack: Filecoin Virtual Machine, Nodejs, IPFS, Lattice-crypto.
- A Smart Water Management System using IoT & Blockchain with Cartesi

Jan 2023

- o **IoT devices** are used for real-time monitoring of the quantity and quality of water in the distribution infrastructure.
- o Data from IoT devices is stored on IPFS for analysis of water usage, wastage, and billing.
- o Blockchain Technology using Cartesi Machine and rollups aid in complex computation over the Big Data.
- o Technology Stack: Cartesi Rollups and Machine, Solidity, IPFS, Filecoin, WEB3Storage, IoT sensors, Raspberry Pi.

#### SKILLS

- Areas of Interest: Data Structures and Algorithms, Deep Learning, Blockchain, System Design, SDLC, Linux, WEB3, Cryptography, Technical Writing, Public Speaking, Relational Databases, Operating Systems, Software Engineering.
- $\bullet \ \ \textbf{Languages:} \ \ \text{C/C++}, \ \text{Java}, \ \text{MySQL}, \ \text{Python}, \ \text{Solidity}, \ \text{Bash}, \ \text{JavaScript}, \ \text{TypeScript}.$
- Tools/Libraries: Nodejs, Selenium, Vercel, Reactjs, OpenCV, TensorFlow.

#### Published Work

#### Blockchain-based Secure Storage and Management of Electronic Health Record using Smart

Card | IEEE Conference | RAIT 2023 conference to be conducted at IIT-Dhanbad

Dec 2022

# ACHIEVEMENTS

- Finalist at ETHIndia Hackathon 2022
- Winner of the Smart India Hackathon-2022 for Problem Statement NS1228
- Shortlisted and Granted Scholarship in ETHDenver Hackathon 2023
- Solved more than 100 DSA questions

#### Extra-Curricular and Volunteer Work

- Treasurer: OWASP Student Chapter, RGIPT
- Editorial Co-head: RGIPT ACM Student Chapter, RGIPT
- Overall Coordinator: Leading a team of more than 150 Volunteers at Gyanarpan, Project Amethi
- Tutorship: Lectured a class of freshers of Bachelor of Technology.
- Teaching Volunteer: Gyanarpan is initiative to educate underprivileged children
- Organizing Committee: Organized the first three-day International Inter-Departmental Technical Fest themed COSMOSx organized by RGIPT ACM Student Chapter.