# PRATIMA BHARTI

 $linked in.com/pratima bharti\\github.com/Pratima Bharti$ 

#### **EDUCATION**

Indian Institute of Information Technology, Allahabad

Master of Technology - Information Technology, Networks and security; CGPA: 8.1

Prayagraj, India July 2022 - present

Indian Institute of Information Technology, Kalyani

Bachelor of Technology -Computer Science and engineering; CGPA: 8.7

West Bengal, India July 2017 - July 2021

Mobile: +91-6394979193

Email: pratimabharti2208@gmail.com

Central Hindu Girls School(K) BHU

Senior Secondary-CBSE ;Percentage: 87%

Varanasi(UP), India July 2014 - July 2016

DAV Senior Secondary Public School

Secondary-CBSE;CGPA: 10

Shaktinagar(UP), India 2014

Coursework/Skills

• Data Structures & Algorithms

• Computer Networks

• Networks security

• Cyber Laws and Security

Standards • Operating Systems

• Database Management System (DBMS)

• OOPS Concept

Projects

• Prevention of Flood & Loot: A systematic attack on the lightning network:

Research Project | Blockchain, Bitcoin, Lightning Network, Flood Loot Attack | (Ongoing)

- Research project focused on addressing security vulnerabilities within the Lightning Network, a layered solution designed to enhance Bitcoin's scalability. The project targets the prevention of flood and loot attacks that could compromise the security of transactions conducted on the network.
- Developed a thorough understanding of how the Lightning Network operates as a scalable solution above the Bitcoin infrastructure.
- Aims to offer a systematic strategy for addressing and preventing flood and loot attack, enhancing the overall security of the Lightning Network.

#### • MultiChat: An ID based multi-user chat application:

- MultiCHAT | Socket Programming, C++, Linux | (Jan March '23)
  - Designed and developed a functional chat application enabling users to engage in multi-party conversations. It is a client-server based model built using socket programming. The application facilitates real-time communication among multiple users in a network.
  - Implemented the server-side logic for handling user registrations, connections and updates. Designed the DNS server to maintain a list of user IPs, ports, and IDs.
  - Enabled efficient message delivery by associating messages with specific IDs(names).
  - $\circ~$  User can register with its name (ID) on one system(server).
  - o Registered user can chat with other through linux terminal interface.

#### • CollegePedia: A MERN stack based College Review Platform:

- O CollegePedia | React, Express.js, Node.js, MongoDB, User Authentication | (April May '23)
  - $\circ\,$  Developed a comprehensive web platform to facilitate college review and information sharing
  - $\circ\,$  Implemented robust authorization mechanisms to securely retrieve data from the MongoDB database.
  - o Utilized Express.js and Node.js for the backend logic, ensuring seamless data flow and user interactions
  - Enabled student registration and login functionality, allowing users to contribute college reviews and manage their posts.

#### • Portfolio: personal website built using React and NodeJS:

- O Portfolio | React, Node.js, HTML, CSS, Responsive Design | (April May '23)
  - o A portfolio website, offering a comprehensive overview of my skills and accomplishments.
  - o Developed the frontend using React, focusing on responsive design and optimal user experience.

### TECHNICAL SKILLS

- Languages: C,C++,Python(Basics),SQL,Socket programming,HTML,CSS,Javascript
- Databases: MYSQL,MongoDB
- Framework: React, Express
- Developer Tools: Git, VScode, SublimeText, LaTeX

## EXPERIENCE

• Teaching Assistant - IIIT Allahabad: Assisting the Professor in conducting lab sessions, invigilating exams, taking doubt sessions for the subject. (Sept 2022 - Dec 2022)

#### CERTIFICATIONS

• The Complete 2023 Web Development Bootcamp - June, 2023