# Chesta Pruthi

cheshtapruthi2502@gmail.com| +91 7011521124 | linkedin.com/in/chesta-pruthi
Aspiring Software Engineer | Python, Java, C++ | Data Structures & Algorithm | System Design

## **Professional Summary**

Detail-oriented Computer Science undergraduate with a strong foundation in **Software Engineering**, **Data Structures and Algorithms**, and **Object-Oriented Programming**. Proficient in **Python**, **Java**, **and C++**, with experience designing and developing software solutions in **Unix/Linux environments**. Familiar with **Software Design Principles**, **Distributed Systems**, **Machine Learning**, and **Information Retrieval**. Actively engaged in **CS-related extracurriculars** and collaborative technical projects. Passionate about building scalable systems, solving real-world problems through code, and continuously learning emerging technologies in **Backend Development**, **System Architecture**, and **Security Software**.

### **Technical Skills**

- Programming Languages: Python, Java, C++
- **Computer Science Foundations:** Data Structures, Algorithms, Object-Oriented Programming, Software Design
- Operating Systems & Environments: Unix, Linux, Bash
- Tools & Platforms: Git, VS Code, GCC, GDB, Make, Shell
- Libraries/Frameworks: STL (C++), Collections Framework (Java)
- **Skills Summary:** Python, Java, C++, Data Structures & Algorithms, Software Engineering, Unix/Linux, Git, Software Design, System Programming, Distributed System (basic), Machine Learning (intro)

#### Education

## **Bachelor of Technology in Computer Science**

Lovely Professional University. India

Expected Graduation: 2027 | CGPA: 7.09/10

#### Certifications

- Microsoft Azure Al Fundamentals (Al-900)
- Foundations of Cybersecurity Google

#### **Projects**

#### **Multithreaded Web Crawler**

Role: Software Engineer

Tools: Python, Threading, Queue, Requests, BeautifulSoup, Unix/Linux

- Built a multithreaded web crawler that scraped and indexed web pages concurrently using threadsafe queues.
- Implemented URL deduplication using hash sets and controlled depth-based traversal with retry logic.
- Demonstrated understanding of concurrency, synchronization, and network I/O in a Unix environment.

## Secure Login & Session Management System

Role: Software Engineer

Tools: Python, Flask, Bcrypt, JWT, SQLite

- Designed a secure authentication system using hashed passwords, JSON Web Tokens, and rolebased access control.
- Followed modular software design with reusable components and robust error handling.
- Simulated and prevented common vulnerabilities like brute-force and SQL injection.

## **Soft Skills**

- Teamwork: Collaborated effectively with cross-functional teams to deliver data projects on time.
- Leadership: Guided team efforts and supported decision-making, improving project success rates.
- Problem-Solving: Used structured, data-driven approaches to resolve complex technical issues.
- Adaptability: Quickly adapted to new technologies and workflows in dynamic environments.
- **Communication:** Simplified technical concepts for non-technical stakeholders to support collaboration.