

# PHOOL ROSHAN JHA

Software Engineer,  
Full Stack Developer

## Personal info

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- IIT Bhilai, Khutelabhata, Durg, Chhattisgarh 491001

## Education

### Indian Institute of Technology Bhilai

CHHATTISGARH JUL 2022 – MAY 2024  
Degree: M. Tech (CSE) Grade: 8.5 CGPA  
Thesis: Security Analysis of Secure Dongle

### Jaipur Engineering College and Research Centre, Jaipur (Affiliated RTU, Kota)

RAJASTHAN AUG 2016 – OCT 2020  
Degree: B. Tech (CSE) Grade: 75.38%

### Kendriya Vidyalaya, NEHU

SHILLONG APRIL 2014 – MAY 2015  
Degree: 12th Grade: 94%

## Links

- /my-portfolio
- /roshanjha280
- /phool-roshan-jha
- /roshan\_jha
- /playstore

## Skills

- C++, C, Java, MySQL, PostgreSQL, php, AWS (Basics services)
- LaTeX, HTML, CSS, JavaScript
- {MS, Libre, GSuite} Office, Adobe Acrobat
- Linux, Windows
- Android Studio, Eclipse, Netbeans, Visual Studio, VS Code
- Git, Github, Postman, Firebase, Local Server (WAMP, XAMPP), SQLite DB, MySQL, OracleDB, MongoDB, .Net, ASP.NET

## WORK EXPERIENCE

### Persistent Systems Ltd.

Full-time, Software Engineer PUNE DEC 2020 – JUL 2022  
Worked as a Full Stack developer and solved User stories and fixed various issues/bugs in the project as per the requirement of the client.

- Backend Dev (Accelya Client)
  - Tech:** JAVA, Spring Boot, Postgres SQL, Microservices, JUnit, Mockito, SOLID design pattern, OOPs, Git, Gitlab, SourceTree, Docker with WSL2, JIRA, Jenkins, CI/CD, Reactive programming, Elastic Search, Cassandra.
- Full Stack dev (Teletrac Navman)
  - Tech:** C, .NET, ASP.NET, MVC, RestFul Web API, SQL, GIT, OOPs, Javascript, Typescript, HTML, CSS, JQuery, ReactJS, SQL Server.

### Suliteos Pvt Ltd.

Intern, Android App Development JUL 2018 – SEP 2018  
**Projects:**

- MTC Child Care** - Improved the user interface, fixed the bugs, improved the connectivity to Firestore, added new features
- Garbage Kart** - Developed the app from scratch using Firestore as cloud storage as per the requirements and working

## THESIS

### Security Analysis of Secure Dongle

IIT BHILAI JUL 2022 – MAY 2024

- Bank Website:** (Project: In private repo)  
(NodeJS, JAVA, HTML, CSS, JS, MongoDB)  
Using Trustoken as the MFA for login page. The Login page will not be displayed until the token has been connected to the system. After the login, the token should remain connected to the system. If unplugged, it will end the session and logout.  
The token used in this is the TrusToken which is provided by CDAC.
- URL Blocker Extension:** (Project: In private repo)  
(JAVA, HTML, CSS, JS)  
This is a chrome extension which blocks the URL until the token is inserted. As soon as the token inserted, it redirects to the site. The URLs to block can be configured manually. For editing the URL list in the extension, the user needs token pin and username in the certificate.

## RESPONSIBILITIES

- Openlake Club** (Mentor)
- Senate Committee** (Chairperson)
- Campus Placement** (Placement Coordinator CSE)
- Student Mentorship Program** (Mentor, Website Developer)

## COURSE WORK

Data Structures, Algorithms, DBMS, Operating Systems, Object Oriented Programming, Computer Networks, Computer Architecture, Software Engineering, Cryptography, Blockchain

**All projects** /my-projects**Chat app with End-to-End Encryption** /chat-app

(Eclipse, Java, Socket Programming)

This is the chat app using Java socket programming with end-to-end applied encryption. The algorithm used in this is AES256.

**Pdf Digital Signing** /pdf-signing

(Java, Maven, Eclipse)

This is a simple project for digital signing the confidential pdf with your digital signature. The certificate used for this is stored in the USB security token which need to be plugged while signing.

**Indian Railway** /indian-railway

(Android Studio (Java), php, WAMP Server, Firebase)

The project is concerned with overcoming problems digitally, faced by the travelers at the station by using the present technology, problems like the problem in listening of the announcements, belonging security, Instant care.

**Scanner Extract text from Images & QR** /scanner-app

(Android Studio (Java), SQLite DB, Google Cloud Vision API)

Extract the texts from images which can be edited or shared. Combined with QR scanner which can scan QR and can be used to get redirected to search engine if wanted.

**Blood Donation Android App** /blood-donation

(Android Studio, JAVA, SQLite)

This is an android app which keeps record of the blood donor. Donor can register themselves in the app. Hospital can use this app for notifications to the registered donor when there is a requirement.

**Library Management System** /lms

(Eclipse, JAVA, Swing, SQLite)

A GUI based windows app to managing books in Library.

**Covid Tracker** /covid-tracker

(Eclipse, JAVA, Spring Boot, Maven, MongoDB)

A simple spring boot app which fetches details of the count of covid effected in each state and displays the data in the app.

**Snake Game in C++** /snake-game

(Visual Studio, C++)

This is a simple console-based snake game.

**Pizza App**

(Java, Spring Boot, Maven, React JS, MySQL)

A Full fledged full stack app which deals with displaying types of pizza, together with order, payment, delivery, and feedback details.

**Student Management System**

(Java, Spring Boot, Maven, React JS, Postgres SQL)

Full Stack application which can be used for managing student details.

**OpenCV 4 in C++**

(Visual Studio, C++, CMake)

Live detection of face, age and gender by implementing caffe trained model.



## Certificates and Prizes

- 2024 Presented my thesis work at 31<sup>st</sup> Convergence India Expo
- 2023 Presented my thesis work at India Mobile Congress (IMC)
- 2023 Participated in Inter IIT Sci-tech
- 2023 Attended IIT Bombay CSE Research Symposium
- 2022 Internal Hackathon in Persistent Systems Ltd. — Got Cash Prize
- 2020 NPTEL Certificates: Programming in JAVA, Design & Analysis of Algorithms
- 2019 Microsoft Technology Associate Certification - Python
- 2019 Subito Mini Hackathon (Android app development) — 2<sup>nd</sup> place
- 2018 Android App on Play Store - Scanner
- 2017 Group Leader at Android Internship, Rajasthan Hackathon, JE-CRC Hackathon
- 2015 Laptop Award for 12<sup>th</sup> merit by Govt of Meghalaya

## Workshop

- 2023 "Face detection using Raspberry" IIT Bhilai
- 2019 Trends in Digital Marketing
- 2017 "Big Data Data Analysis" IIT Kharagpur
- 2017 "Android App Development" IIT Kanpur

## Languages

-  English (Fluent)
-  Hindi (Fluent)

## Hobbies

- Badminton
- Cycling
- Biking