

# AYUSH SINGH RATHORE

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## Work Experience

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- **Frontend Developer & Machine Learning Intern** Aug 2024 - Present  
*CheckExplore* [Project Link](#)
  - Designing & implementing the **front-end** and establishing the connection with Fast API for an AI tool streamlining defect identification in tyre manufacturing, reducing inspection time for the manufacturers.
  - Evaluating 2 types of body defects detection in tyres using **YOLO v8** model, and incorporating results by labeling the dataset to train the model.
- **Campus Automation Student Lead** Mar 2023 - Sep 2023  
*SRM University - AP* [Project Link](#)
  - Spearheaded **campus automation**, an initiative aimed at automating the University's tasks, resulting in a 90% reduction in task completion time and streamlined University operations.
  - Architected and implemented a solution for **Out-pass Booking** which has benefitted over **3,000 students**.

## Projects

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- **E-commerce Order Management System — Linux, Nodejs, Reactjs, Kubernetes** [Project Link](#)
  - Engineered a scalable **microservices-based application** that allows users to manage products and orders, with a Node.js backend (Express) and React frontend.
  - Containerized 2 microservices with **Docker**, deployed on a **Kubernetes cluster (3-node setup)** with Helm, automated CI/CD pipelines using GitHub Actions.
- **Health Lens: Healthcare Platform — React, Fast API, Firebase, Python, Google-AI Studio** [Project Link](#)
  - Developed **lung disease severity prediction** using the existing Machine Learning model with the x-rays images trained dataset, a model to detect **Covid 19 & Pneumonia** by the chest x-ray images.
  - Designed the **interface**, integrated the model and implemented the **firebase authentication**.
- **Athena: P2P Lending Platform — React, Solidity, Web3js, Infura-API, Ethereum** [Project Link](#)
  - Designed P2P Lending Platform by integrating the web technologies with web3 frameworks, utilized Ethereum Blockchain along with the basics of finance.
  - Adopted the concept of credit score and applied it to the Web3 ecosystem using the smart contract to implement the logic.

## Technical Skills

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- **Programming Languages:** JavaScript, Python, Solidity, C/C++, SQL
- **Web Development:** HTML, CSS, ReactJs, Tailwind CSS, Web3Js, NodeJs, Express, FastAPI, MongoDB
- **Tools & Technologies:** Kubernetes, Git, Linux (Ubuntu & Kali), Raspberry Pi, OpenZeppelin Contracts, TCP/IP protocols, Network security protocols, Ethereum, Blockchain, Smart Contracts, Microservices Architecture

## Education

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- **SRM University, Andhra Pradesh** Sep 2021 - Jul 2025  
Bachelor of Technology in **Computer Science and Engineering**  
*CGPA: 7.5*  
*Relevant Coursework:* Data Structures and Algorithms, Object-Oriented Programming, Computer Networking, Database Management, Network Security

## Leadership / Extracurricular

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- Served as a member of the **Academic Council** at the University for a duration of 1 year, Established the **Student Academic Committee**, fostering collaboration and boosting student engagement by **40%** & redesigned curriculum across **3 schools**, ensuring **100% implementation and alignment with industry standards**.
- Organized the **first National-level Technical & Cultural fest** of the University, with footfall over **7000 attendees**.
- Secured a track prize in a **national level hackathon** for designing a decentralized informal lending and borrowing platform.