Ayush Singh Rathore

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Work Experience

- **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 streamling defect identification in tyre manufacturing, reducing inspection time for the manufacturers.
  - Evaluating 2 types of body defects detection in tyres using the model, and incorporating results by labeling the dataset to further 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

- **KubeCart — AWS, Nodejs, Reactjs, Kubernetes, Docker**   *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** using AWS EC2.

- **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

- **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

- **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**

Leadership / Extracurricular

- 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.