Raina Saxena

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○ rainasaxena   ⌁ LeetCode

🎓 EDUCATION

Vellore Institute of Technology,   2021 − 2025 | Chennai, India
Bachelor of Technology - Computer Science and Engineering

🧠 SKILLS

Languages: C++ | Python | Java | C | SQL | HTML | CSS | SCSS | JavaScript

Frameworks: ReactJS | Django | Tailwind CSS

Version Control: Git

Core Subjects: AI | ML | DBMS | OS | CN | SWE | Compiler Design ⎮ Cryptography & N/w Security

💼 PROFESSIONAL EXPERIENCE

Intern Software Development Engineer, Jio Platforms Ltd.   08-2023 − 11-2023
                                                      Navi Mumbai, Maharashtra, India
- **JioGamesCloud :** Utilized Google Lighthouse and PWA Builder to improve website visibility and search engine ranking (SEO). Analyzed website performance, provided recommendations for enhancing speed and responsiveness. Contributed creative ideas and implemented improvements for user interface and experience. Developed skills in ReactJS, NextJS, and Django while successfully completing custom web development projects.
- **JioKrishi :** Contributed to the website's translation initiative, ensuring global accessibility for agricultural enthusiasts. Engaging in component designing and development, I enhanced user interfaces, making information more intuitive for farmers.

📁 PROJECTS

LuxeSelect
- Built a full-stack jewellery store website with **Django (backend) and ReactJS (frontend)**.
- Employed **Django Rest Framework** for robust APIs, enabling smooth communication between backend and frontend.
- Ensured secure user authentication with **JWT tokens,** efficient product management, and responsive design using **TailwindCSS**.
- Enhanced user experience with streamlined cart and checkout.
- Integrated **PhonePe payment gateway** for secure payment transactions.
Live Demo 🔗 | **GitHub** 🔗

Multiple Object Detection in Traffic Places
Detected multiple vehicles in traffic places for autonomous/self-driving vehicle systems using **Histogram Oriented Gradients (HOG)** and **Discrete Fourier Transforms (DFT)** feature extraction method and classifying the results through **XGBoost ensemble learning model.**

Secure Session-Key Establishment for Smart Home Devices
- A robust and efficient framework for secure device registration, bootstrapping, and authentication.
- It leverages HMAC-SHA256 for tamper-resistant MAC generation and accommodates multiple devices without compromising security.
- It uses a lightweight design for smart devices, bootstrap with a nonce, and registers devices using secret keys.
- Adjustable parameters ensure tailored security, including timestamp difference tolerance.

Nike Clone
- Crafted a **ReactJS** based Nike clone featuring a **user login system** and **React Hot Toast** for dynamic notifications.
- The frontend is enriched with **AOS animations** for a modern, visually captivating design.
- Implemented **user authentication** using the **DummyJSON.com API**.
Live Demo 🔗 | **GitHub** 🔗

📖 PUBLICATIONS

State-of-the-Art of Voice Assistance Technology, Mitigating Replay   07-05-2024
Attacks: A Comprehensive Discussion, IEEE Xplore
Click here to view the published paper. 🔗