## SHUBHANAN SHARMA

New Delhi

#### **EDUCATION**

## University of Petroleum and Energy Studies

B. Tech in Computer Science (AI/ML) - CGPA - 8.59

Pursuing 3rd Year

Dehradun, Uttarakhand

Modern School, Barakhamba Road

CBSE Class XII - Grade: 91%

**2020** – **2021** New Delhi

### **PROJECTS**

## The Wild Oasis 🗷 | React, Styled Components, Supabase | CODE | LIVE

- Developed a comprehensive hotel management system with **React** and **Supabase**, featuring real-time dashboard analytics, booking management, and secure authentication for hotel staff.
- Implemented advanced frontend features including dark/light theme support, data visualization with Recharts, and a complete cabin and guest management system with image upload functionality.

### Natours 🗷 | Node.js, Express.js, MongoDB, REST API | CODE | LIVE | API

- Developed a full-stack tour booking platform using **Node.js**, **Express**, and **MongoDB** with **JWT** authentication, role-based access control, and **Stripe** payment integration for secure bookings.
- Designed and implemented a responsive **RESTful API** with advanced tour filtering, interactive mapping via **Leaflet**, and comprehensive security features including **Helmet**, **data sanitization**, and **rate limiting**.

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- PomodoLock: Implemented the Pomodoro Technique with website blocking—using Chrome's Storage, Alarms and WebNavigation APIs—to create a distraction-free work environment.
- NoMoRecs: Developed a real-time DOM-manipulation solution with MutationObserver to disable YouTube's recommendation engine and prevent "rabbit-hole" viewing.
- PureView: Engineered a hybrid ad-blocker combining the declarativeNetRequest API with DOM-element hiding to remove ads while preserving page performance.

# $\underline{\bf Snap\text{-}n\text{-}Solve} \ \ \underline{\hspace{-0.1cm} } \ | \ {\bf Python, \ OpenCV, \ TensorFlow} \ | \ {\bf CODE}$

- Developed a computer vision application using **Python**, **OpenCV**, and **TensorFlow** that performs real-time Sudoku detection, digit recognition via **CNN**, and solution overlay through webcam input.
- Implemented an optimized **Best-First Search algorithm** with **priority queue** mechanics that efficiently solves puzzles of varying difficulties by prioritizing cells with fewest possible values, minimizing computational complexity.

### TECHNICAL SKILLS

Languages: Python, Java, C++, JavaScript, HTML, CSS

Tools/Frameworks: React, Next.js, Node.js, Express.js, Mongoose, Pug, Postman, OpenCV, TensorFlow, Keras

Databases: MYSQL, MongoDB, Supabase

Course Work: Data Structures and Algorithms, Database Management Systems, Operating Systems, Object-Oriented Programming(OOP), Machine Learning, Computer Networks, Computer Vision

### ACHIEVEMENTS AND CERTIFICATIONS

- \* Solved 170+ Problems on Leetcode
- \* Participated in the CSI Hackathon 8.0 to develop innovative solutions and enhance problem-solving 🔀
- \* The Complete JavaScript Course Udemy
- \* Node.js, Express, MongoDB and More: The Complete Bootcamp Udemy 🗹
- \* Automate the Boring Stuff with Python Programming Udemy 🗷