# Varun Shrivastav

Software Engineer

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#### **SUMMARY**

Experienced software engineer, skilled in full-stack web development, proficient in technologies like MERN stack, Django and MySQL.

#### **EXPERIENCE**

Software Engineer Mar '24 - Present

Big Brand Bucket remote

• Developing an ecommerce web application for a card printing business similar to Vistaprint, along with a portal for visa services and an online store for selling home decoration products. Utilizing Node.js, React.js, Prisma, Redux, MySQL, and Tailwind CSS.

#### **Freelance Software Developer**

- Fixed CORS error by creating a Node.js proxy server, adjusted Nginx settings, and addressed system bugs and security issues.
- Improved load time and solved bugs of React.js application by implementing code splitting, lazy loading and configuring Webpack.
- Developed a Telegram bot with Node.js for group management and message scheduling, featuring a user-friendly interface.
- Developed a web application for sending invoices to customers using PayPal API and Django Framework.

### **PROJECTS**

#### Social Media Web App featuring AI Powered Multiplayer Game

- Developed features such as a Friends system, real-time personal and group messaging, instant notifications, email OTP verification.
- Car Simulation game with ADAS built with a neural network, device orientation controls, street light animations, real-time lead board.
- Tech Stack Django, Channels, REST, MySQL, Celery, Redis, WebSocket, Bootstrap, HTML Canvas, JavaScript, CSS Github Game Demo

## XP ChatBot for Telegram Groups with Ranking System

- A versatile chatbot with a wide range of XP commands to monitor and manage member rankings and levels in telegram groups.
- The bot offers a note-taking app, script runner for Python and JavaScript, OCR, news fetching, and OpenAI powered conversations.
- Tech Stack PyTelegramBotAPI, MongoDB, FastAPI, Nodejs, AWS Lambda, DynamoDB, Docker, Nginx, News API Github Bot Demo

## **Collaborative Whiteboard Web Application**

- A drawing application that enables users to register, create or join rooms, create art together and save their creations in real-time.
- Users can communicate with each other within rooms through real-time text chat or engage in peer-to-peer video chat.
- Tech Stack Django REST Framework, React JS, Channels, MySQL, Node.js, WebSocket, HTML Canvas, PeerJS

Github Demo

## **Browser Extension for Keeping Bookmarks**

- A browser extension that lets users signup and login to save and access bookmarks on multiple browsers and devices.
- Enforced load balancing for backend scaling and integrated caching to improve performance and reduce server expenses.
- Tech Stack MongoDB, Express.js, React JS, Node.js, Redis, Nginx, Docker, AWS EC2, JWT

Github Demo

#### DISSERTATION

## Overview of Reinforcement Learning with Tic Tac Toe and Python

- Built a decision tree model for machine learning mode, integrated a minimax mode and added a player-vs-player mode.
- Utilized memorization, eliminated symmetrical states in the minimax algorithm, and improved runtime efficiency by up to 97%.
- Tech Stack Pygame, Numpy, Pickle, Pygbag Github Play Demo

### **KEY SKILLS**

• Python • Django • MySQL • React • Node.js • MongoDB • GraphQL • Git • Docker • Data Structures • Algorithms

### **EDUCATION**

B.Sc. Hons. Electronic Science | SGTBK Delhi University (2023)

Class 12 CBSE | Dayawati Modi Academy Meerut (2020)

Class 10 CBSE | Dayawati Modi Academy Meerut (2018)