

EXPERIENCE

Developer and web administrator at NowTreat (Healthcare)

2023- 2025 Dec

- Collaborated with the founder, assisting staffs and marketing team to develop a patient-centric website, for ease of adaptability, used the Wordpress cms with a custom plugin for easy appointment booking, pre-/post-care guide.
- Build a patient feedback and assistance loop to seek feedback, provide treatment guidance, and improve patient engagement.
- With an optimised website and integrated feedback with marketing workflows, resulting in a 25% increase in clinic footfall through organic and paid digital marketing conversions.

Freelance web and app developer

2021- present

- Worked with local enterprises, proprietors, and small businesses to understand requirements, analyse market and competitor insights, and deliver tailored data analysis, e-commerce applications, web platforms, and automation solutions aligned with their vision
- Successfully delivered 10+ projects, including: Rajeshwari Asha Foods (e-commerce application for monitoring dairy products, Aditya Pathology (automated scheduling and customer notification system), Yatidhara [fmcg company]
- Learn to handle end-to-end development lifecycle across multiple concurrent projects, communication with the clients, and understood problem faced by small cities founder

Tutor at a private coaching institute

- Started as a passionate home tutor and progressed to teaching at a computer training institute, my role was to guide students in building web applications & Python programming.
- Guide students to prepare for tripleC and take their mock tests.

PROJECTS

1. AushadiNet-GATv2: Drugs Interaction (ADR) Predictor Model

- *Mission:* Safeguarding cardiac patients by predicting adverse drug-drug interactions (DDIs) before they happen.
- The idea is to provide a comprehensive platform (multiple agent system) for content creators, enabling them to create high-quality content more efficiently by leveraging their own statistics, history, audience personalisation, and trends.
- *Features/Tools:* Image and video creation & editing, content idea research, content monitoring, earning and monetisation opportunities, content scheduling, trends discovery page, and persona definition.

2. Inferenz: Data insights application

- *Idea:* Indian small shop and business owners store their sales and inventory data in ledgers or diaries, but they never utilise it. So Inferenz serve as a handy application where owners, as a users can upload any format of unstructured and structured data, like: ledger book, handwritten notes, data photo, Excel data or any other DB format. Inferenz's sequential AI agents validate and structure the data for analysing and show insights, visualisation and predictions.
- Help small owners utilise their data for better sales, inventory management and product management.
- *Tech Stack:* Frontend: React + Next.js, Backend: FastAPI, lib: Pytorch, HuggingFace, Langchain, Pillow, & more. DB: Postgres + pgvector, Apache Kafka, and Apache Spark.

3. Self-learning, self driving car simulation with vanilla Javascript

- Built a self-driving car simulation from scratch using core machine learning principles and multi-layer perception optimisation
- Application and cars use sensors, genetic algorithm with mutation-based evolution, population-based learning, and real-time neural network Visualisation, which helps to play with machine learning fundamentals and self-driving car movement.

4. Indicore.in - STEM learning website

- Built a website in intermediate school standard to help myself, students, and aspirants prepare for their exams. It provides free educational resources: handwritten notes PDFs, flashcards, summary cheat sheets, Web Stories and free mock tests with solutions.
- Build on WordPress, got 100K impressions and also approved for Google AdSense

5. R Package: Plan Pomodoro Session

- Plan and generate a Pomodoro schedule for your task in a single step. On session end, provides a summary and efficiency calculation.
- The package provides different functions that help break your total available time into Pomodoro intervals: alternating focus sessions and breaks. It is designed to be flexible and user-friendly by handling different input scenarios without throwing immediate errors.

TECHNICAL SKILLS

- **Languages:** Python, TypeScript, R lang, JavaScript, SQL
- **Frameworks:** Flask, Django, FastAPI, React js, Next js
- **DB:** PostgreSQL, SQLite, MongoDB, Redis, ChromaDB
- **Tools:** Apache Ecosystem (Kafka, Spark, and Hadoop), Hugging Face Ecosystem, Ollama, n8n
- **Libraries:** PyTorch, NLTK, Numpy, Pandas, Matplotlib, PEFT, Transformers, Langchain, LlamaIndex, SQLAlchemy, ChromaDB

EDUCATION

Harvard CS50

Certified CS50x Introduction to Computer Science, Introduction to Cybersecurity, Programming with R, Artificial Intelligence with Python

Veer Bahadur Singh Purvanchal University, Affiliated College

Bachelor of science, Computer Science Major (*Dropout in third semester*)

May 2021 - September 2022

Master Diploma in Computer Application from Amritkosh Infotech

CERTIFICATIONS

- Stanford CS229 (Machine Learning), Stanford CS230 (Deep Learning), Stanford CS224R (Deep Reinforcement Learning)
- Introduction to Cloud Native DevOps Agile and NoSQL by IBM - [July 2024]
- Introduction to Amazon EC2 by AWS Training - [Oct 2025]
- Introduction to Amazon Simple Storage Service (S3) by AWS Training - [Oct 2025]
- Amazon SageMaker AI Getting Started by AWS Training - [Oct 2025]
- Build Your Own Chatbot by IBM SkillsBuild- [Jan 2025]
- Market research by Great Learning - [May 2024]
- Google Technical Writing Course One and Two by Google Developers - [June 2022]
- Content Creation, Optimization, SEO and Strategies by HubSpot Academy

PUBLICATION

2 years

1. AushadhiNet-GATv2: Graph Attention Network for Predicting Drug-Drug Interactions in Polypharmacy

I researched and presented AushadhiNet-GATv2, a graph neural network architecture for predicting drug-drug interactions in polypharmacy. System addresses critical limitations of existing DDI prediction methods through multi-view molecular representation learning, hierarchical GATv2 message passing with residual connections, dual-head classification for interaction detection and mechanism prediction, and integration with patient-specific cardiovascular risk profiling

2. How to Build and Deploy Ingress Microservices in Kubernetes

Microservices is a common approach used to design scalable software systems. Describe ways to build and deploy microservices in Kubernetes with Ingress for HTTP routing using a Docker image from the Docker Hub repository and building YAML files for both services.

OPEN SOURCE CONTRIBUTION

Django

Contribute to Django Foundation during the Pre-GSoC 2025 period, work on Django GitHub Actions and automate the contribution basic checking and monitoring, under the mentorship of Tim Chiling and Sarah Boyce

EXTRACURRICULAR ACTIVITIES AND RECOGNITION

- Hackathon Winner: Bye to Beat on Devpost | **Project: AushadhiNet-GATv2 DDI Model | Predicting Drug-Drug Interactions**
- Deloitte Australia Technology Job Simulation on Forage
 - Develop a program to normalise different telemetry JSON data of IOT machine (Simple ETL pipelines)
 - Craft a complete 'software development proposal' for a real-time monitoring live dashboard
- Assistant TA for freshers, in fundamentals of computer application (an extracurricular subject), contributed to quizzes and problem sets creation and answered the students' chat queries.