

Narpat Ram Kalwaniya

Lead Application Engineer

Education

Dual Degree in Agricultural and Food Engineering

Jul '17 - Jul '22

Indian Institute of Technology, Kharagpur

Kharagpur, India

Micro Specialization in Entrepreneurship and Innovation

Professional Experience

Senior Engineer (Application Engineering) | Tiger Analytics, Bangalore

Jul '23 - Present

Project 1: Collaborated with a multidisciplinary team of Consultants, Data Scientists, DevOps Engineers, and Developers to architect and launch a feature-heavy B2B marketing mix application. Leveraged React with TypeScript and Material UI to develop a highly responsive, scalable, and visually intuitive user interface. Designed and implemented a suite of reusable, modular components, including dynamic charts, data tables, dropdowns, file upload/download capabilities, and streaming features. Integrated RESTful APIs for seamless data retrieval and submission, utilizing React Query for efficient client-side caching and Redux to manage complex application state, API interactions, and global data flow

Project 2: Designed and developed OCR, Translate, and Image Generator applications with features like file handling and user feedback (like, comment), optimized workflows using S3 presigned URLs, integrated **WebSocket** communication, and improved prop flow with **Context API** for a GenAl application

Analyst (Data Science) | Tiger Analytics, Bangalore

Jun'22-May'23

Worked on estimation of **Conversion Likelihood of Opportunities** with different product/market/consumption segments & geographies using statistical tests, EDA, and feature engineering, building a logistic regression model with accuracy improved from ~0.85 to ~0.91 with VIF selection

Projects

PrepMe.AI Feb '25 - Present

Leading the development of a student-focused application using React and TypeScript for front-end, FastAPI for backend, and AWS infra for hosting & storage. The platform enables students to upload & curate content, interact with LLMs for personalized learning, and create & take custom assessments

Internships

Process Excellence Intern (DS) | EpiSource, Chennai

Jan '22 - May '22

Accustomed to medical coding and leveraged data analytics tools to adjust the penalty risk associated with US Health Insurance Business; Programmed multiple algorithms in **SQL & pandas** to process medical claims, codes, and pharmacy data retrospectively to flag issue codes

Business Analyst DS Intern | Sitel Group India, Mumbai

Jun '21 - Jul '21

To enhance the operational efficiency of a tire manufacturing firm by automating customer service using NLP, tagged 10,000+ reviews for topic extraction with RegEx and sentiment analysis with BERT; improved engine precision from 81% to 87% through text processing with nltk and spaCy

Data Science Intern | Curl Analytics, Bangalore

May '21 - Aug '21

Project1: Enhanced the product strategies of a gaming business by programming functions for generating personalized game/region/proxy/genre specific insights, performing univariate/multivariate EDA, performing feature importance & engineering new features

Project2: Automated the extraction and reorganization of data output from pdfplumber and easyocr into word, line, paragraph and page levels

Machine Learning Intern | VegaMX Inc., USA

May '19 - Jul '19

Developed a Corn Yield **Prediction Model** using 38 years of climate, satellite, and geospatial data, improving MAE from 9.12 to 3.14 by data scaling, hyperparameter tuning with GridSearchCV, RandomSearchCV, & Optuna, and ensemble algorithms like Linear Regression, Random Forest, and RNN

Graphic Designer | CheckMyGaadi, New Delhi

Dec '20 - Mar '21

Designed and executed publicity strategies to attract a larger audience, creating over 100 engaging creatives using Adobe Photoshop and Illustrator

Extra Curricular Activities

- President, Prakriti 2021: Elected representative of AgFE Department responsible for the conduction of annual Agri and Food innovation festival
- Governor, RCA IIT KGP: Responsible for the management of 41 members team including Sponsorship, Management, Publicity and Graphic Design
- RK Hall IIT KGP: Vice Captain of Silver winning Illumination team | Awarded as Best Secretary 2018-2019 | Bagged 2 silver medals in Athletics GC

Skills

React JS (Redux, Context API), UI/UX, JavaScript/TypeScript, Material UI, HTML, CSS, REST, Amazon Web Services, Web3, Python, SQL, Fast API, Flask, Git and GitHub, Docker, Software Development, Analytics, Data Science & Machine Learning, Graphic Design, Leadership, Team Management