



PREM KUMAR

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Patna, India

[Linkedin](#)

[GitHub](#)

[Portfolio](#)



EDUCATION

Indian Institute of Technology, Madras

Bachelor's Degree in Data Science & Applications
(Jan, 2021 – Jan, 2025)

R.K.D College, Kankarbagh, Patna

I.Sc. (2017-2019)

82.8%

G.B.P.S Cantt Area, Gaya

Xth (2017)

9.6 CGPA

EXPERIENCE

Generative AI Engineer Intern | Loqo AI

(July, 24 – present.)

- Automated text-to-video conversion using AI models. Streamlined prompt generation, audio and image creation, and video editing. Worked with models like GPT-4o, Turbo, and LLAMA2, utilizing LangChain for flexible applications.

WebOps Intern | Medical Network Pvt. Ltd.

(Jan, 24 – June, 24)

- As a WebOps Team Intern, I maintained **website** functionality, resolved **technical issues**, and optimized digital infrastructure. I also collaborated with the **data team to analyze** leads, **marketing**, and inventory data, providing insights for **improved** processes and decision-making.

Web Developer & Designer | TechoTians

(Aug, 23 – Dec, 23)

- Developed and maintained **websites** and **landing pages** for **optimal performance** and user experience. **Analyzed market trends** and user engagement to improve marketing strategies. Designed engaging **social media posts** and conducted content **research** to support marketing campaigns.

SKILLS

Programming Languages: Python, JavaScript, Vue.js, Java.

Frameworks & Tools: Flask, Bootstrap, LangChain, Redis, Celery, SQLAlchemy, Jinja2.

Data Science & Analytics: scikit-learn, Matplotlib, Seaborn, NumPy, Pandas.

Databases & Data Management: SQL, SQLite.

Core Concepts & Methodologies: OOPs, Data Structures & Algorithms, RESTful APIs.

Advanced Technologies: Generative AI, Predictive Modeling.

ACHIEVEMENTS

- 100% Scholarship for my Bachelor's Degree at IIT Madras
- Got Highest percentage in PCM (Theory) Paper in college - 86.6% (XIIth Board)

HOBBIES

- Reading Books, Playing Chess & Cricket

PROJECTS

[Machine Learning Project: Food Recipe Rating Prediction](#)

Developed a predictive model to forecast **food recipe ratings** using a dataset of recipe names, reviews, and features.

Key Contributions:

- Conducted **Exploratory Data Analysis (EDA)**.
- Preprocessed data: imputed missing values, scaled numerical features, encoded categorical data.
- Built and compared models like **Logistic Regression, Random Forest, KNN, Naive Bayes & SVC**.
- Achieved over **77% accuracy** | (**Logistic Regression**)

Skills: Data analysis and visualization | Feature engineering | Model selection and tuning | Python (scikit-learn, pandas, numpy)

[Machine Learning Project: Diabeteasy](#)

Developed a machine learning application to assist individuals in managing diabetes.

Key Contributions:

- Implemented key features such as **medication tracking, local doctor suggestions, and personalized dietary advice**.
- Integrated **Google Maps API** for finding **nearby healthcare professionals**.
- Used **HTML, CSS, Bootstrap, JavaScript, and Flask** for front-end and back-end development.
- Employed **logistic regression to predict diabetes** outcomes based on user input.
- Utilized **Gemini Pro's image models for nutritional suggestions** based on uploaded food images.
- Implemented **user authentication and session management with Flask-Login**.

[Capstone Project: Optimization of Operations at Shanvi General & Dairy Products Shop](#)

Methodology:

- Collected data on stock levels, sales, purchasing patterns, and customer feedback.
- Used statistical tools for trend analysis.
- Employed WBS, Gantt Chart, and data visualization.

Outcomes:

- Reduced stockouts by 30% with a predictive model.
- Cut customer service response times by 20%.
- Delivered comprehensive report with recommendations.

[Library Management System](#)

Key Features:

- User Functionality: Users can request, read, and return e-books.
- Librarian Functionality: Librarians can add sections/e-books and manage user access.
- Sections: Managed with ID, name, date created, and description.
- Books: Managed with ID, name, content, author(s), date issued, and return date.
- Automated Recommendations: System displays recently added sections/books or based on ratings.

Tech Stack:

Backend: Flask for API | **Frontend:** VueJS for UI | **Templating:** Jinja2 | **Styling:** CSS, Bootstrap | **Database:** SQLite | **Caching and Batch Jobs:** Redis and Celery

ROLES & RESPONSIBILITIES

- I organised & **Lead a 36-Hours Grand Hackathon at IIT Madras** Campus, demonstrating strong leadership & Event management skills while fostering innovation and collaboration among participants
- At **Nallamala House, IIT Madras**, I serve as the WebOps **Team Lead and Designer**. In this role, I lead a team responsible for website operations, ensuring seamless functionality and user experience. Additionally, I contribute to designing and enhancing web interfaces to align with organizational goals and user needs.