

ABHAY PRATAP SINGH PATEL

 [LinkedIn](#) |  +91 9695213908 |  20me02040@iitbbs.ac.in |  [GitHub](#)

Work Experience

Technical Product Manager Intern | [AdrenL](#)

Aug, 2023 - March, 2024

- **Led the end-to-end development** of a SaaS platform from concept to beta launch within 4 months, collaborating with the founder in Jordan and the marketing team in Singapore, ensuring alignment with international business objectives.
- **Drove key feature development**, including chat, review system, and secure payment integration with PhonePe, enhancing product offerings and effectively managing partnerships with stakeholders like PhonePe and Digio.
- **Conducted market analysis** by interviewing over 25 adventure service providers in Uttarakhand to identify market gaps and enhance platform offerings.
- **Implemented data-driven decision-making** by integrating the Google Trends API to optimize homepage sorting, resulting in improved customer engagement and a reduced bounce rate.
- Designed **Figma mockups**, **site maps**, and layouts for better user retention, including SEO and Google Analytics integration. Implemented user-centric policies like cancellation policy, enhancing user satisfaction, and supporting profitability.

Research Consultant | [Worldquant Brain](#)

- Developed and implemented advanced trading strategies by formulating alpha models using a simulation-based platform and statistical analysis for out-of-sample testing.

Projects

Cold Email Generator

- Developed a cold email generator tool using Groq, Langchain, and Streamlit to automate outreach by extracting job listings from company careers pages and generating personalized emails.
- Integrated portfolio link sourcing from a vector database to align email content with job descriptions, improving relevance and personalization.
- Deployed a user-friendly Streamlit app that assists business development teams in reaching out to potential clients, providing value propositions for dedicated software engineering services.

Ride Demand Surge Price Prediction

[Collab](#)

- Developed a predictive model to forecast surge pricing types, improving cab-to-customer matching efficiency.
- Conducted **exploratory data analysis (EDA)**, handled missing values, and encoded categorical variables to prepare the dataset for machine learning.
- Built and tuned models, achieving **73% accuracy** through feature selection and hyperparameter tuning.
- Improved service efficiency during peak demand times by enabling proactive surge pricing predictions using **Python, Pandas, and Scikit-learn**

Human Activity Recognition

- Built machine learning models (Random Forest, LSTM) for classifying human activities from smartphone sensor data, achieving 90%+ accuracy.
- Performed time-series preprocessing and feature extraction to enhance model performance.
- Optimized deep learning models using TensorFlow for real-time activity recognition.

Education

Dual Degree (B.Tech + M.Tech)

Indian Institute of Technology (IIT)

Bhubaneswar, Odisha

2020 - 2025

- Major in Mechanical Engineering

Positions of Responsibility

Inter IIT Vice Captain | Medichain

[Github](#)

- Originated the idea for a decentralized application to securely store patient medical histories, leading the team in a **tech entrepreneurship** competition at the Inter IIT Tech Meet among 22 IITs to present this innovative concept.
- Developed comprehensive **Figma mockups** to visualize the user interface and experience, and built a **functional prototype** using Solidity, leveraging crypto for decentralization

Governor | Finance Society of IIT Bhubaneswar

- Founded and led FEBS into a top finance society with 100+ members. Hosted events with 300+ attendees, featuring speakers like Zerodha Founder and Anil Bhasan. Partnered with WorldQuant, ISB, and managed a Product Development Club. Conducted workshops in finance, math, statistics, and quant.

WebND Coordinator | Sports Fest IIT BBS

[Github](#)

- Managed a 30+ member team to create a multifunctional website for registrations and event publicity, while overseeing sponsorship acquisition, organizing offline events, and coordinating logistics, contributing to a successful fest with over 1,000 attendees across three days.

Achievements

- **Codeforces**: Pupil on CodeForces (Max rating: 1334).
- CodeRelay - Secured rank 1 out of 1600 participants on unstop in a 3-day software development hackathon
- Secured a rank within the top 4% in JEE Advanced (2020) among more than 10 lakh students.

Skills

- Python, SQL, DBMS, C, C++, DataStructures and Algorithms, Tableau, Project Management, Excel, Google Analytics, Figma, Premier Pro, Mixpanel, Root cause analysis, Problem-solving