

Raj Kumar

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EDUCATION

Indian Institute of Technology Mandi

Bachelor of Technology - C.E., Minor in Management

Mandi, HP

Aug 2017 - July 2021

SKILLS

- **Programming:** Python, SQL, AWS (S3, Athena, Glue, EC2), Airflow
- **Machine Learning:** XGBoost, BERT, FastText, NLP, LLMs, Clustering, Feature Engineering
- **Data Analysis:** Google Analytics, Excel, Data Wrangling, Exploratory Data Analysis
- **Visualization:** Tableau, Data Studio, Superset, Kibana
- **Advertising Platforms:** Google Ads, Apple Search Ads, Pinterest Ads

EXPERIENCE & PROJECTS

Data Scientist

pixis.ai

May 2022 - Present

Bengaluru, India

- **ML Development:** Developed and deployed machine learning models for ad targeting and keyword optimization
- **Data Pipeline:** Built robust ETL pipelines for processing large-scale advertising data
- **Performance Improvement:** Improved targeting efficiency by 8% across multiple ad platforms
- **UI Development:** Created Streamlit dashboard for ML model sandbox, boosting team productivity
- **Recognition:** Awarded Performer of the Week for developing a highly adopted Google Universal Model

Keyword Recommender Engine

pixis.ai

- Developed an XGBoost-based machine learning model using Google Ads Search Query Report (SQR) data and third-party metrics
- Implemented advanced filtering, sorting, and recommendation algorithms for keyword selection and targeting group assignment
- Built a complete end-to-end ML pipeline, including data exploration, data wrangling, feature engineering, model development, and validation
- Achieved 15% improvements in keyword relevance and 8% increase in ROAS for client campaigns

Targeting Recommender Engine Using LLMs and Third-Party Metrics

pixis.ai

- Developed an innovative targeting recommendation system leveraging Large Language Models (LLMs) and third-party metrics
- Conducted comprehensive competitor traffic and targeting analysis to identify industry trends and missed opportunities
- Utilized NLP modules including BERT, FastText, and LLMs for contextual understanding and relevant targeting identification
- Pioneered the first-in-market automated targeting recommendation engine for emerging ad platforms like Apple Ads and Pinterest
- Achieved 20% improvements in target audience reach and a significant increase in conversion rates across multiple platforms.

Product Analyst

Lead School

Sep 2021 - May 2022

Bengaluru, India

- **Data-Driven Strategy:** Leveraged data insights to guide product roadmap, resulting in a 20% increase in user engagement
- **Dashboard Creation:** Developed Tableau and Data Studio dashboards, reducing manual reporting time by 70%
- **ETL Pipeline:** Implemented automated data retrieval system using Python and Airflow, improving data freshness to 24 hours
- **BRM Automation:** Streamlined dataflow and automated metrics calculation, saving 300 hours monthly across departments

Multi-Level Insights (Automated Board Review Deck)

Lead School

- Created automated Monthly Board Review Meeting Deck (Google Sheets-based) by consolidating key metrics from HR, Marketing, Product, Sales, and Support teams
- Tracked cross-organizational metrics including HR attrition rates, sales conversion rates, Marketing Churns, app installs, DAU/MAU, and product team performance (Jira scrum metrics)

Live CXO Insights Dashboards

Lead School

- Developed live dashboards using Tableau for CXOs, displaying real-time actionable insights across organizational verticals.
- Integrated data from multiple different sources consisting of Clickhouse, HubSpot, Redshift, internal CRMs, sales teams maintained Google Sheets and Data Studio to enable a holistic view of performance metrics

Weekly Product Insights

Lead School

- Generated and distributed automated weekly insights reports to product owners for various apps (Parent & Student App, Teacher's App, Teacher's Web App, School Owner's App)
- Integrated custom metrics designed for understanding students' and teachers' performance across classes, subjects and schools
- Provided adoption metrics and key performance indicators (KPIs) relevant to each app, enabling data-driven product enhancements

Sales Team Actionable Dashboards

Lead School

- Automated dashboards for individual sales teams, providing real-time actionable insights and client-specific adoption metrics
- Improved the sales team's performance by providing them with timely, data-driven actions to enhance client engagement and product adoption

Daily Live Report Automation for LPL and Country-Wide Competitions

Lead School

- Developed an automated reporting system for daily live updates of the Lead Premier League (LPL), a nationwide student competition
- Ranked schools and students at different levels and in different categories providing real-time performance metrics and rankings

Data Analysis Intern

Geo Carte Radar Technology Pvt. Ltd.

Dec 2018 - Jan 2019

Gandhinagar, Gujarat

- **Data Interpretation:** Analyzed geological data using RADAN7 and ArcGIS, troubleshooting technical issues
- **POC Project:** Led a proof-of-concept project on crack detection using Radan7 software, using application understanding and reporting in client-requested formats

NOTABLE SIDE PROJECTS

Predicting Earthflow Movement

IIT Mandi

- Developed algorithms for predicting earthflow movements using ensemble techniques
- Applied data analysis and machine learning concepts to geological problems using weather and soil movement data gathered using IOT devices deployed in nearby landslide-sensitive areas

Groundwater Recharge System

INTER IIT TECH MEET 2018

- Designed a rainwater harvesting system for hilly terrains, utilizing gravitational potential energy and an ensemble filtration system to enhance groundwater recharge
- Gained recognition from IIT faculty for the innovative and practical approach to sustainable water management

HONORS & AWARDS

Performer of the Week: Recognized for developing a widely adopted Google Universal Model at Pixis.ai

Inter IIT Tech Meet: Led team at IIT Bombay and participated as a member at IIT Roorkee

Winner - Inter College CAD Event: Secured first place in CAD competition at EXODIA Techfest, IIT Mandi

Most Innovative Idea Award: Received for presenting an innovative solution at the Robo-Soccer event during UTKARSH (Intra-college Tech Fest)