# KARTIK RAUT

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## **EDUCATION**

## Northeastern University, Boston, MA. (GPA: 4.0)

Expected May 2025

Master of Science in Data Analytics Engineering

Courses: Foundation of Data Analytics, Data Visualization, Data Mining, Database Management for Analytics

## Yeshwantrao Chavan College of Engineering, Nagpur, India

Oct 2020

Bachelor of Engineering in Electronics and Telecommunication

## **SKILLS & CERTIFICATIONS**

Programming: Python (NumPy, Pandas, Matplotlib, Scikit-learn, PyTorch, Seaborn), SQL, HTML, CSS

Databases: MySQL, Oracle SQL Developer, MongoDB, PostgreSQL

Cloud Technologies: AWS, Oracle Cloud Infrastructure, Azure

Machine Learning & Statistics: Supervised and Unsupervised Algorithms, EDA, Data Mining, Data Modeling, Data Visualization,

Significance Testing, Hypothesis Testing, Data Sampling and Distribution, Probability

Other Tools: Tableau, Power BI, Microsoft Office, Excel, Git, Datawrapper, Flourish, Oracle Siebel CRM

Certifications: Oracle Cloud Infrastructure, Oracle Cloud Data Management

#### PROFESSIONAL EXPERIENCE

Accenture July 2022 – June 2023

Application Development Analyst

Pune, India

- Utilized data analysis techniques to ensure the accuracy and reliability of SurePay telecom product testing procedures
- Crafted test scenarios for telecom products, impacting 15M+ subscribers on postpaid and prepaid plans, employed data analysis to understand user behavior and tailor test scenarios for maximum impact on customers
- Executed 500+ monthly Robo Tester Evolution scripts, identifying, tracking, and debugging bugs
- Conducted quarterly regression, realigning 1350+ products to meet the latest business requirements
- Demonstrated cross-functional leadership and problem-solving, utilizing data analysis for informed decision-making

Accenture Dec 2020 – June 2022

Application Development Associate

Mumbai, India

- Coordinated configuration and testing operations for the largest telecommunication giant in the UK
- Played a key role in data extraction by leveraging SQL Developer, ensuring accurate and efficient retrieval of information for testing purposes of telecom packages and solving complex quantitative problems
- Customized telecom product test plans through detailed analysis of functional/business requirements
- Oversaw the execution, analysis, and debugging processes within Oracle Siebel CRM
- Contributed to the SDLC by conducting thorough regression testing and validation

## **PROJECTS**

## Los Angeles Crime Data Analysis (Numpy, Pandas, Seaborn, Time Series, Prophet)

Sep 2023

- Conducted Exploratory Data Analysis (EDA) and Data Cleaning on time series data related to crime in Los Angeles.
- Utilized Facebook's **Prophet** time series forecasting model, to generate weekly crime predictions
- Analyzed crime types, considering events and correlating with economic and demographic variables
- Designed insightful data visualizations to analyze multifactorial influences on city crime trends.

## Customer Segmentation RFM Analysis (Scikit-learn, Numpy, Pandas, Seaborn)

Oct 2023

- Worked with the E-commerce dataset to categorize the customers into different groups based on their purchasing behavior using recency, frequency, and monetary value (RFM) analysis
- Implemented K-means Clustering for customer segmentation using calculated RFM scores
- Divided customers into different categories and formulated targeted marketing recommendations

## **EEG Classification Model** (TensorFlow, Scikit-learn)

Nov 2023

- Utilized **Logistic Regression**, **Random Forest**, **Decision Tree**, and **XGBoost** for binary classification and multi-class classification, distinguishing various types of seizure from non-seizure activity
- Achieved F1 scores of 94% and 73% with XGBoost in binary and multi-class scenarios, respectively

## <u>Tiles Texture Search Model</u> (Pytorch, Matplotlib, Numpy, Machine Learning)

Nov 2023

- Implemented a Convolutional Neural Network (CNN) for image classification with a focus on extracting similar textures of titles in a dataset
- Attained a train loss of 0.252, accompanied by a train accuracy of 92.30% and, showed promising performance on the validation set, achieving a val loss of 0.566 and a val accuracy of 82.00%
- Demonstrated expertise in training deep learning models to effectively process and classify images.

## **Exploring Energy Production and Consumption Dynamics** (Tableau)

Dec 2023

- Collaborated with a team to develop a comprehensive **Tableau dashboard** showcasing global energy production and consumption trends
- Employed diverse presentation strategies to craft dynamic, captivating data visualization, facilitating compelling story-telling within the data