

ANJANA KARATHAT RAJEEV

Data Science Graduate

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• Melbourne

Summary

Data science professional with expertise in healthcare AI applications, combining strong statistical foundation with hands-on experience developing diagnostic tools. Skilled in machine learning, NLP, and creating user-friendly interfaces for AI systems.

Education

RMIT University	Melbourne
Master of Science in Data Science GPA: 3.6 / 4.0	02/2023 - 12/2024
Aalto University - Student exchange program	Uusimaa, Finland
Master of Science in Applied Statistics and Data Analytics GPA: 3.2 / 4.0	01/2022 - 07/2022
Amrita Vishwa Vidyapeetham (Deemed University)	Tamil Nadu, India
Master of Science in Applied Statistics and Data Analytics GPA: 9.19 / 10.0	06/2020 - 07/2022
Amrita Vishwa Vidyapeetham (Deemed University)	Tamil Nadu, India
Bachelor of Science in Mathematics GPA: 8.83 / 10.0	06/2017 - 06/2020

Experience

InflaMed	Melbourne, Australia
Data Science Intern	07/2024 - 11/2024
Machine Learning, Natural Language Processing, LangChain, Flask, Python, Image Classification, Healthcare AI Applications	
<ul style="list-style-type: none">Developed an advanced chatbot for skin condition diagnosis using LangChain, integrating image classification models and research paper processingImplemented deep learning for image analysis and NLP for symptom evaluationCreated user-friendly web interface with Flask for seamless interaction with the AI diagnostic systemCollaborated on end-to-end development from data preprocessing to system integration	

Projects

Real-time Taxi Data Stream Processing	2024
HDFS, MapReduce	
<ul style="list-style-type: none">Calculated ride metrics on-the-fly while storing results in HDFS.Implemented check pointing and state management techniques to ensure system reliability and fault tolerance.	
Predicting User Knowledge Levels with Machine Learning	2023
Machine Learning, Decision Tree Classifier, K-Nearest Neighbors (KNN), Scikit-Learn, Pandas, Matplotlib, Seaborn	
<ul style="list-style-type: none">Developed Decision Tree and KNN models to classify user expertise in Electrical DC Machines using academic performance data, achieving 90% and 85% accuracy respectivelyAnalyzed correlations between study habits (e.g., revision frequency) and exam outcomes, proposing integration of behavioral data (mouse dynamics) for enhanced predictions	
Grad-CAM: Comprehensive Survey	2022 - 2023
Class Activation Map, Explainable Machine Learning, Grad-CAM, Evaluation, Intersection of Union	
<ul style="list-style-type: none">Compared performance of CAM models with computer vision architectures (ResNet50, VGG-16, ViT)Found XGradCAM with ResNet50 yielded highest performance (68.34% confidence score)	
Comparing Logistic Regression & Decision tree classifier in Predicting Prevalent Hypertension	2022
Machine Learning, Logistic regression, Decision Tree Classifier, Sklearn, Matplotlib, Seaborn, NumPy	
<ul style="list-style-type: none">Developed logistic regression and decision tree models to predict hypertensionDecision tree classifier emerged as preferred model for interpretability and nonlinear handling	

Skills

Data Analysis & Statistics: Data Manipulation, Exploratory Data Analysis (EDA)Statistical Analysis (Hypothesis Testing, Regression, A/B Testing)Basic Predictive Modeling (e.g., Linear/Logistic Regression)Data Storytelling, KPI Definition, Business Reporting, Advanced Excel/Google Sheets
Data Visualization & Business Intelligence (BI): Power BI, Tableau, Looker, Metabase, Dashboard Design, Interactive Reporting, SQL for Data Querying and Analysis, Metrics Tracking, Trend Analysis
Programming & Automation: Python (Pandas, NumPy, Matplotlib/Seaborn), R (Tidyverse, ggplot2), SQL (Advanced Queries, Window Functions), Shell Scripting (Bash), Basic Automation
Cloud & Big Data Tools: Azure, AWS (S3), GCP, Apache Spark (PySpark), Hadoop (Hive), Cloud Databases (e.g., Azure SQL, AWS RDS)
Tools & Collaboration: Version Control (Git, GitHub), Collaboration Tools (Jira, Confluence, Slack), OpenAI APIs for NLP tasks (sentiment analysis, text summarization)
Frontend Development: HTML, CSS, JavaScript, Node.js, Responsive Design, React
Data Science & Machine Learning: Data Modelling, Predictive Modeling, Machine Learning, AI Integration, NLP, Statistics, Data Visualization, Dashboards, Business Intelligence (BI).