

ANJANA KARATHAT RAJEEV

Data Science Graduate

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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	Espoo, 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

Skin Cancer Detection App using Grad-CAM	2023
Class Activation Map, Explainable Machine Learning, Grad-CAM, Object detection, Healthcare, Evaluation metrics	
<ul style="list-style-type: none">Integrated Grad-CAM with ResNet50 architecture, improving localization accuracy by 15%Trained model targeting 95% accuracy, generating class activation maps for enhanced lesion recognition	
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 and 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	
Difficulty Analysis of Quiz Item with Mouse Dynamics	2021 - 2022
HTML, PHP, Database Management, JavaScript, pattern recognition	
<ul style="list-style-type: none">Created website tracking mouse movements to differentiate genuine understanding from guessworkUsed response times to assess quiz difficulty levels for tailored student support	

Volunteering

Amritapuri Ashram	
Food Service Assistant and Crowd Control	2017 - 2020
Volunteered as a Food Service Assistant at Amma's Ashram, dedicating my time every September from 2017 to 2020.	

Strengths

 Data analysis expertise Ability to generate actionable insights from complex datasets.	 Machine learning skills Proficiency in building AI models for healthcare diagnostics.	 Research enthusiasm Passion for tackling real-world challenges through research projects.
 Web development experience Creating user-friendly interfaces for AI systems		