RENUKA P

Project Associate – AI & Machine Learning

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Profile Summary

An early-career research scientist with a strong focus on AI and machine learning applications in healthcare and agriculture. Demonstrated experience in prompt engineering, AI-driven solutions for medical diagnostics, and agritech innovation. Passionate about integrating advanced ML models with real-world impact.

Professional Experience

Project Associate

M. Kumarasamy College of Engineering

Jun 2023 – Present

- Researcher on SERB-CRG sponsored project in AI-based health and agricultural tech
- Engineered ML/DL pipelines for disease detection and prediction models
- Developed and optimized AI prompts across biomedical and agritech applications
- Contributed to multiple peer-reviewed IEEE Scopus-indexed conference publications

Education

M.E. – Communication Systems | 2023 | Grade: 9/10

M. Kumarasamy College of Engineering

B.E. – Electronics and Communication Engineering | 2014 | Grade: 8.6/10

12th Grade (Tamil Nadu Board) | 2010 | Grade: 90.58%

10th Grade (Tamil Nadu Board) | 2008 | Grade: 88.6%

Certifications

NPTEL: Introduction to Machine Learning

NPTEL: The Joy of Computing Using Python

Oracle Cloud Infrastructure 2023 AI Certified Foundations Associate (Valid through March 2026)

IBM: Introduction to the Tools and Techniques of Data Science

Research Publications (IEEE Scopus Indexed)

Progression of Disease Forecasting in Recurrence Cervical Cancer Using Logistic Regression - https://doi.org/10.1109/ICECA58529.2023.10395205

Adaboost ML-based Modelling to Predict Chronic Kidney Disease Staging - https://doi.org/10.1109/ICSTEM61137.2024.10560884

Identifying and Categorizing Moringa Oleifera Leaf Disease - https://doi.org/10.1063/5.0194471

Diabetic Foot Ulcer Detection Using Inception V3 DL Technique - https://doi.org/10.1109/ICACCS60874.2024.10717009

Disease-Free Survival Prediction in Cervical Cancer using Naive Bayes ML - https://doi.org/10.1109/ICOSEC61587.2024.10722641

Gene Sequence Detection for Recurrent Cervical Cancer via Biomedical Sensors - https://doi.org/10.1109/CSITSS64042.2024.10816947

FFNN-Based Prediction of Gene Expression in Cervical Cancer - https://doi.org/10.1109/ICEARS64219.2025.10940993

Hyper Homocysteinemia and Cervical Cancer Recurrence Prediction - https://doi.org/10.1109/ICCES63552.2024.10860207

LSTM Model Forecasting Cervical Carcinoma Risk Factors - https://doi.org/10.1109/ICSSAS64001.2024.10760386

Hyperparameter-Tuned SGD and GB for Mental Health Monitoring - https://doi.org/10.1109/ICCES63552.2024.10859936

Key Skills

- **Artificial Intelligence & ML**
    - Machine Learning
    - Deep Learning
    - Prompt Engineering
- **Programming & Tools**
    - Python
    - TensorFlow
    - OpenAI GPT
- **Research & Writing**
    - Academic Writing
    - Research Methodology
    - Technical Documentation
- **Project & Communication**

- Project Management
- Creative and Analytical Thinking

Languages

English (Fluent)

Tamil (Native)

Extracurricular Activities

Volunteering for Tech Communities

Attending Conferences and Meetups

Contributing to Open Source Projects

Hobbies

Reading about Emerging Technologies

Hiking

Declaration

I hereby declare that all the information provided above is true to the best of my knowledge and belief.

Renuka P

Additional Certification

This certifies that
Renuka P
has successfully completed the following course:
Introduction to the Tools and Techniques of Data Science.