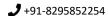
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INTERNSHIP

Board Infinity Summer Internship (Machine Learning & AI)

May 2024 - July 2024

- Explored advanced machine learning techniques, focusing on regression interpretation, ensemble learning, and evaluation metrics.
- Applied Decision Tree and Random Forest on the Wisconsin Breast Cancer Database to classify tumors as benign or malignant, optimizing model performance through feature engineering and hyperparameter tuning
- Evaluated models using accuracy, precision, recall and F1-score, demonstrating the effectiveness of ensemble learning in improving robustness and reducing overfitting
- Gained hands-on experience in medical data classification, reinforcing the real-world impact of AI in healthcare

PROJECTS

Autonomous Vehicle Simulation - Python, Machine Learning

November 2024

- Developed a simulation framework for testing autonomous vehicles in a virtual environment to enhance safety and performance evaluation
- Integrated environmental modeling, probabilistic models for obstacle detection, and reinforcement learning for adaptive traffic behavior
- Enabled realistic testing of perception, decision-making, and control systems, reducing the need for costly real-world testing

Language Correction and Recognition System - Python, Machine Learning

November 2024

- Implemented a hybrid framework leveraging probabilistic models for improved prediction accuracy, error correction, and entity identification, surpassing traditional methods in evaluation
- Formulated a real-time text correction system combining autocorrect, spellcheck and Named Entity Recognition (NER) using Hidden Markov Models (HMMs), N-grams and Conditional Random Fields (CRF)

Text-To-Speech Bot - Automation Anywhere

October 2024

- Designed a Python-based bot using pyaudio to convert input text into human-like speech for reading out critical alerts
- Unified an email module to send the input text as an email, ensuring accessibility and notification support for users

CERTIFICATIONS

Machine Learning & AI July 2024

Board Infinity - Certificate Link

- Interpreted linear models by understanding coefficients, p-values, R-squared values, and how they influenced predictions
- Analyzed ensemble learning techniques such as Bagging, Boosting, and Stacking to improve model performance by combining predictions from multiple models, enhancing accuracy and robustness
- Studied the optimization technique of Gradient Descent to minimize a model's loss function by iteratively adjusting parameters. Examined different variants, including Stochastic, Batch, and Mini-Batch Gradient Descent

Dynamic Programming, Greedy Algorithms

April 2024

Coursera - Certificate Link

- Acquired a deep understanding of key algorithmic paradigms like Divide and Conquer, Dynamic Programming, and Greedy Algorithms, applied them to solve complex problems efficiently
- Researched advanced computational concepts such as intractability and introductory quantum computing topics, focused on computational limits and the potential of quantum algorithms to tackle NP-hard problems

Generative AI Primer February 2024

Coursera - Certificate Link

- Observed the transformative potential of Generative AI in computing, focused on techniques for crafting effective prompts and understanding how AI models responded to various input patterns
- Learned about the ACHIEVE framework for enhancing human-AI collaboration, optimized the use of AI in decision-making processes, and obtained insights into the future vision of AI integration

TECHNICAL SKILLS

Languages: Python, C, C++

Technologies: VS code, Google Colab, Automation Anywhere, Microsoft Office (Word, Excel, Powerpoint)

Libraries: Scikit, Pandas, Numpy

Skills: Data Pre-processing, Data Cleaning, Machine Learning, Generative AI, Problem Solving, Robotic Process

Automation, Data Structure and Algorithms, Scripting in Python

EDUCATION

Lovely Professional University

Bachelor of Technology - Computer Science and Engineering - CGPA: 7.92

Phagwara, India

Since September 2022

Namo Rims Junior College

2020 - 2021

Senior Secondary - Percentage: 92%

Pune, India

Kendriya Vidyalaya

2018 - 2019

Matriculation - Percentage: 96%

Pune, India