RONALDO JERANG

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ABOUT ME

I'm a computer science undergrad at the National Institute of Technology, Arunachal Pradesh. I am actively -seeking Machine Learning opportunities. I am passionate about learning new technologies and broadening my horizons in the field of AI/ machine learning industry. The development of machine learning algorithms using ML libraries like Tensorflow and Keras as well as a number of additional machine learning techniques to generate models is something that interests me greatly. I enjoy working in teams to increase productivity, creativity, and problem-solving by utilising a variety of skills, perspectives, and shared responsibilities.

EDUCATION AND TRAINING

B.Tech

National Institute of Technology Arunachal Pradesh [17/12/2020 – Current]

City: Itanagar

Country: India

Website: https://www.nitap.ac.in/

PUBLICATIONS

Privacy-Preserving of Edge Intelligence using Homomorphic Encryption

[2023]

Study to increase the edge system's efficiency when dealing with real-time encryption. Utilizing an unique edge intelligence approach for the IoT device to distribute data more fluidly and encrypt it with more safety. The federated learning will employ many machine learning models at the system's edge, yet the data training and everything will be Protected.

Link: https://ieeexplore.ieee.org/document/10205745

WORK EXPERIENCE

Research intern

Indian Institute of Technology Guwahati [12/2022 – 01/2023]

City: Guwahati

Country: India

- The research of the donyi-polo (sun&moon) creed, which is worshipped by the indigenous people of Arunachal Pradesh.The study of how distinct or tribe communities depict the sun and moon in diverse shapes for varied purposes.
- Developed an image classifier to classify the supplied data with a better accuracy improvement and a 10% increase in success rate over the other model using the same data.
- Even with manual assistance and a relatively small dataset that was kept up with high key correctness, the developed model had an overall success rate of 80% – 90%.

Student Intern

Bharat Sanchar Nigam Limited [06/2022 – 07/2022]

City: Itanagar

Country: India

- Developed a machine learning model to automate the formerly manual process of classifying complaints, boosting total productivity by 12–14%.
- Used a variety of methods, including K-means, logistic regression, and classifications, to construct the machine learning model utilising real-time complaint data from the BSNL database.
- Analysed the data and found the optimal solution/algorithm, saving time and effort for the testing team by 12%.

Machine learning trainee

Onlei technologies [01/2022 – 03/2022]

City: Noida

Country: India

- Developed a fraud detection system using the bank data and various algorithms such as linear regression, clustering, KNN, and K-Mean, obtaining an accuracy above 90%.
- Implemented a machine learning model to predict the car bought using logistic regression, with an accuracy f1-score of 80%.
- Learnt various machine learning tools such as TensorFlow, Keras, etc. and experienced training models using both supervised and
- unsupervised learning.

PROJECTS

Diabetes prediction

[06/2023 – 08/2023]

• Developing models that use medical data analysis to predict an individual's likelihood of getting diabetes with Decision Tree's greatest accuracy of 73%

Number order prediction

[04/2023 – 05/2023]

• Utilising supplementary data to forecast the sequential arrangement of numbers in a pattern or sequence factors. The model provided an accuracy of MSE of 13.3, MAE of 379, and r2 of 0.59.

Maximizing Edge Intelligence with Federated Learning Optimization

[01/12/2022 – 24/09/2023]

• Pioneered a federated approach for gradient updates, catering to edge-based model requirements. Achieved logarithmic scaling (log(n)) for model selection and sharing at the edge.

• Through comprehensive analysis, achieved a substantial 14% improvement rate in the initial phase and 3% in the final phase.

• Successfully reduced initial phase overhead by 2.5% and maintained a minimal 0.69% reduction in subsequent phases.

MANAGEMENT AND LEADERSHIP SKILLS

Administrative Coordinator

- Planned and created the blueprint for the tech-fest and supervised all the coordinators.
- Legal control over the administration of the Technical fest.
- Handled the sponsorship duty and raised a sum 8 lakhs for the fest.

Link: https://youtu.be/QgSjdO1_430