Anugraha Nayak

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Education

B.Tech CSE (AI ML) CGPA: 9.35/10.0 – Link
The Neotia University – Sarisha, West Bengal Sept 2021 – Present

Indian School Certificate (ISC) Class 12th - 93% – Link
The Assembly of God Church School – Kolkata, West Bengal Apr 2019 - May 2021

Indian Certificate of Secondary Education (ICSE) Class 10th - 91% – Link
The Assembly of God Church School – Kolkata, West Bengal Apr 2018 - May 2019

Skills

Data Analysis and Visualization:
SQL, Python (Pandas, NumPy, Seaborn, Matplotlib)

Additional Technical Skills:
React (Native), FastAPI, AWS, Docker, Github Codespace, Expo

Machine Learning & Statistics:
Scikit-Learn, TensorFlow, PyTorch, Keras, Linear Regression, Logistic Regression, Decision Trees, Random Forest, XG Boost, Neural Networks, Deep Learning, Natural Language Processing, Exploratory Data Analysis

Programming Languages:
C, Java, Python, Javascript, HTML, SQL

Experience

AI & Machine Learning Engineer – Xeta Labs, Guwahati, Assam, India June 2024 - Aug 2024
- Engineered an advanced conversational AI chatbot capable of ingesting and processing news from 5 online sources, enhancing user engagement by enabling real-time queries on current events and news topics
- Engineered a dynamic quiz application using Expo and React Native, featuring a level-based progression system and incorporating both text and image-based questions to enhance user engagement and learning outcomes

Key Technologies: Python, Selenium, Beautiful Soup, FastAPI, React Native, Pandas, NumPy, Expo, Github Codespace Link

Artificial Intelligence with Machine Learning – AILABS, Kolkata, West Bengal June 2023 - July 2023
- Spearheaded the development of an advanced movie recommendation system utilizing machine learning algorithms and content-based filtering, leveraging TF-IDF vectorization for enhanced personalization and accuracy.

Key Technologies Python, Pandas, NumPy, Scikit-learn, TfidfVectorizer Link

Amazon Web Services – BrainOvision Solutions Pvt. Ltd. Jan 2024 - Apr 2024
- Successfully completed a three-month intensive internship program specializing in Amazon Web Services (AWS), actively contributing to multiple projects. Demonstrated strong initiative, technical proficiency, and commitment to achieving project objectives in a fast-paced cloud computing environment.

Key Technologies AWS CLI, EC2 instance, S3 bucket, Elastic IP, VPC Link

Projects

Firearms and Knives Threat Detection using YOLOv8 Link
- Developed a threat detection system using YOLOv8, a state-of-the-art object detection algorithm, to identify firearms and knives in images and videos in real-time. Leveraged deep learning techniques and computer vision to train the model on a custom dataset of firearm and knife images, achieving high accuracy of 84% in detection.
- Tools Used: Roboflow, YOLO, PyTorch

AI-Driven Formula 1 Race Outcome Prediction Model Link
- Developed a machine learning model to predict Formula 1 race results (podium finishes, points, DNFs) by analyzing historical race data, driver/constructor performance, weather, and circuit characteristics. Leveraged Python for feature engineering (e.g., *Home Advantage Index*, *DNF Risk Scores*), and model training (Random Forest, XGBoost). Achieved **95% accuracy** after optimizing hyperparameters and validating insights like "home races boost team performance by 18%." Results were applied to fantasy leagues and strategic team decisions, demonstrating real-world impact.
- Tools Used: Python, Pandas, Scikit-learn, XGBoost, ML Algorithms, and GridSearchCV. .