Anju Vilashni Nandhakumar

Boston, MA

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LinkedIn Github Portfolio

EDUCATION

Northeastern University Boston, MA

Master of Science in Artificial Intelligence

• Courses: Programming Design Paradigm, Algorithms, Foundations of Artificial Intelligence, Natural Language Processing.

SRM Institute of Science and Technology

Chennai, India

Bachelor of Technology in Computer Science and Engineering

• Specialization: Artificial Intelligence and Machine Learning

WORK EXPERIENCE

Web Developer Intern

JobDae, Banglore, [Oct 2020 – Feb 2021]

- Designed an integrated database using SQLite, optimizing the React architecture for on-demand, detailed feedback.
- Curated over 50 website changes, enhancing user flow and comprehension of platform capabilities and features.

TECHNICAL SKILLS

Languages C, C++, Python, Java, JavaScript, Node.js

Tools SQL, MongoDB, Git, Flask

Packages Scikit – Learn, Numpy, SciPy, Pandas, NLTK, Matplotlib

Machine Learning Linear/Logistic Regression, Clustering, Classification, ML Algorithms, Statistical Analysis, Deep Learning

PROJECTS

Deep Learning Approach to Indian Sign Language Recognition

Tech Used: OpenCV, Keras, Tensorflow, Convolutional Neural Network, Recurrent Neural Network, Python.

- Engineered a deep learning model for real-time Indian Sign Language (ISL) recognition.
- Overcame dataset challenges and local language variations by creating custom Convolutional Neural Network (CNN) classified 36 ISL signs.
- Achieved 99.4% validation accuracy, enhancing communication accessibility for the hearing impaired.

Music Recommendation System based on Facial Emotion Recognition

TECH USED: OpenCV, Keras, Tensorflow, Convolutional Neural Network, Recurrent Neural Network, Python.

- Pioneered the development of a Music Recommendation System integrating Facial Emotion Recognition.
- Employed live camera input to discern and analyze users' emotional expressions.
- Applied cutting-edge machine learning algorithms to deliver personalized playlist recommendations, elevating the emotional resonance of music interactions.

A Job Search Application based on Natural Language Processing and Sentiment Analysis

TECH USED: Natural language processing, MongoDB Natural Language ToolKit, Python.

- The aim of the project was to create an online forum that focuses on creating a safe professional workspace for women and people belonging to the LGBTQ+ community.
- The application enables a safe space for women and genderqueer budding entrepreneurs to find investors for their products and projects, employers to find employees willing to work for them and employees to find jobs of their interest where they are treated with respect.

Detection of Pneumonia in Lungs

TECH USED: Keras, Tensorflow, Convolutional Neural Network, Computer Vision, Python.

- A project that involved using a Keras ML model with Convolutional Neural Network to train the system to classify the X-ray
 images and to accurately predict whether a patient's lungs are adversely affected by COVID-19 or not.
- This project was developed using the methodologies of Computer Vision.