

# THARUN BHEEMANADULA

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## EDUCATION

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- **JNTUH University College of Engineering, Jagtial** 2019-23  
*Bachelor of Technology in Information Technology* CGPA: 8.12
- **Alphores Junior College, Mancheria - Intermediate** 2017-19  
*MPC stream* Percentage: 98.6
- **Krishnaveni Talent School, Mandamarri - SSC** 2016-17  
*Telangana Board of Secondary Education* CGPA: 9.3

## PERSONAL PROJECTS

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- **Air Quality Index Prediction**  
*Devised a precise air quality prediction model, forecasting ranges, and executing pollution mitigation via Streamlit.*
  - Proficiently gathered and processed historical and real-time air quality data encompassing pollutants (SO2, NO2, PM2.5, NOI, SPMI, RSPM, SPM).
  - Applied diverse advanced machine learning models to train on this data for comprehensive analysis.
  - Attained a 95% accuracy rate in predicting air quality index, aiding in proactive pollution control measures.
  - Technology Used: Python, Streamlit.
- **Pneumonia Detection using Deep Learning**  
*Constructed a CNN and applied Transfer Learning for accurate pneumonia detection using deep learning techniques.*
  - Employed VGG16 architecture for robust feature extraction, resulting in accurate pneumonia classification.
  - Optimized model performance by implementing data augmentation and generator techniques.
  - Performed thorough data preprocessing, including resizing and normalization, to optimize the training dataset.
  - Trained the model on a large dataset of chest X-ray images, achieving an accuracy rate of 92.7%.
  - Lowered false positives by 25% in pneumonia detection via ensemble learning.
  - Technology Used: Deep Learning(CNN,VGG16), TensorFlow, Python, Flask.
- **Netflix Movie Recommendation**  
*Harnesses the Eclat algorithm for accurate movie recommendations on Netflix by closely examining user-watching history.*
  - Applied numpy, matplotlib, and pandas to adeptly import and preprocess data for analysis.
  - Conducted association rule generation to analyze inter-movie relationships.
  - Improved movie recommendations accuracy by 15% through fine-tuning association rule parameters.
  - Technology Used: Python, Apyori Library.

## EXPERIENCE

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- **Data Science Virtual Internship** April- May2023  
*Let's Grow More* Online
  - Demonstrated comprehensive understanding of data science projects with strong analytical skills.
  - Completed and analyzed 10 real-world data analysis projects, demonstrating proficiency in data preprocessing and analysis.
  - Actively engaged in machine learning (including supervised and unsupervised learning) and deep learning models.

## TECH SKILLS

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**Languages:** Python, C,SQL

**Libraries :** Python Libraries

**Databases:** Relational Database(MySQL)

**Technologies:** Machine learning

**Relevant Coursework:** Data Structures & Algorithms, Operating Systems, Object Oriented Programming, Database Management System, MS Office,Software Engineering.

## CERTIFICATIONS

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**Virtual Data Science Intern Certification:** Recognized for completing a virtual internship in the field of Data Science through LetsGrowMore, demonstrating practical knowledge and experience.

**Machine Learning :**Attained specialized Machine Learning certification from PrepInsta, demonstrating expertise.

**SQL:**Received SQL certification from PrepInsta, showcasing proficiency in SQL database management, querying, and data manipulation techniques.

## ACHIEVEMENTS

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- **Inspire Scholarship Selection:** Attained the first position in the district during the intermediate examination, leading to the prestigious selection for the Inspire Scholarship.
- **Letter of Recommendation for Data Science Internship:** Garnered a Letter of Recommendation from Let's Grow More for the impactful contributions made during the Data Science internship, reflecting strong work ethic and valuable skills.