ROHAN SAI NALLA

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EDUCATION

UNIVERSITY OF COLORADO BOULDER

Boulder, Colorado

Master of Science in Data Science, CGPA: 3.8/4

Aug, 22 - May, 24

Coursework: Statistical Methods and Applications, Data Mining, Machine Learning, Data Science as a Field.

GITAM INSTITUTE OF TECHNOLOGY

Visakhapatnam, India

Bachelor of Technology (B.Tech), Computer Science and Engineering, CGPA: 8.77/10

Jul, 18 - May, 22

Coursework: Data Structures, Discrete Mathematics, Database and Analysis of Algorithms, Machine Learning, Data Mining, Data Warehousing, Operating Systems.

SKILLS

Programming Skills: Python, C, C++, R, Java, Bash, HTML, CSS.

Data Science and Machine Learning: Tensorflow, Keras, Pandas, Numpy, Scikit-learn, Open CV, SQL. **Tools & Utility:** VS Code, KNIME, Notion, LaTex, Adobe Photoshop, Quarto, RMarkdown, API, Docker.

Disciplinary Skills: Time Management, Multitasking.

Languages: English, Hindi, Telugu.

PROFESSIONAL EXPERIENCE

Graduate Research Assistant

Boulder, Colorado

Department of Psychology and Neuroscience, Supervisor - Dr. Lei Yuan

Jan, 23 - Current

Tochnology and Data backbone at the Laboratory My Contribution improved the Lab's efficiency by 60%

- Technology and Data backbone at the Laboratory. My Contribution improved the Lab's efficiecy by 60%.
- Designed and Developed cognitive Stimulus and Response experimentation in Psychopy integrated with Eyelink 1000.
 Operated the Pupil Lab's Invisible for streamlined data collection for behavioural research.
- Fabricated and Documented python pipelines and intructions for GUI data encoding applications for Lab's future assessments.
- Conceptualized an automated Deep Learning Pipeline for Behavioural Data Collection.

Phoenix Global Pvt Ltd

Hyderabad, India Jun, 21 – Sept, 21

Machine Learning Engineer Intern

Project - Prognostic Classification of Patients with Hepatocellular Carcinoma

- Gained knowledge of Machine Learning principles and Industrial standard Data Science process Model, CRISP-DM.
- Developed a robust pipeline in KNIME with several Machine Learning approaches to classify the data.

PERSONAL & ACADEMIC PROJECTS

The Formula 1 Web Paddock

<u>Deployment</u>

- Developed a web application that holds real-time analytics of Formula 1 Races.
- Integrated a streamline use of the API to showcase analytics as soon as the data is available.
- Invented two perspectives into the dashboard to show analytics for potential Investors in the Sport and for the Fans.

COVID-19 Analysis and Prognosis Based on Pre-Conditions

- Developed an Interactive Dashboard with real-time analytics of COVID-19.
- Incorporated the Statistics of Global Vaccine Administrations and Quantified Vaccine Efficacies.
- Fabricated a Neural Network to Predict the Likelihood of requiring either Intubation or an Intensive Care Unit.

Data-Centric Understanding Chicago Crime

- Leveraged intricate analysis techniques with community area-wise discretion to uncover nuanced crime patterns, employing both supervised and unsupervised machine learning methods.
- Discovered intriguing insights through association rule mining, revealing distinct crime patterns across various community areas, emphasizing the importance of localized strategies.
- Engineered a robust neural network-based supervised classification system, categorizing crime types based on crime characteristics, enhancing crime prevention and response strategies.

The Anatomy of Deep Learning

- Designed a web application to maintain records of various Deep Learning experiments.
- Orchestrated the web page to Illustrate complexities of Deep Learning concepts in a visual way.
- Integrated a sandbox section to experiment with the trained models.

TECHNICAL PAPERS

Comparative Study of Reliability of Transfer Learning to Classify Plant-Based Diseases

View Publication

International Journal of Engineering and Advanced Technology (IJEAT) - Volume-10 Issue-6

- Analyzed various pre-trained Neural Network Architectures to classify visual representations of plant-based diseases.
- The purpose of this study was to offer a methodology for assessing crop conditions utilizing sophisticated systems to detect disease signs and intervene early.

Deep Categorization of Blood Cells Using Depth-wise Convolutions

View Publication

International Journal of Innovative Technology and Exploring Engineering (IJITEE) – Volume-10 Issue-12

- Proposed a robust system that can precisely classify white blood cells based on their morphological differences.
- This research aims at alleviating the stringent requirement of manual cytological studies by supplanting them with intelligent systems.

EXTRACURRICULAR

Start it Up — Author

Blog Page

- Start it Up is the most influential publication on Medium, with over 700,000 followers.
- Authored technical blogs related to the field of Machine Learning to interpret contemporary predicaments such as Covid-19.

INTERESTS

Astrophotography