ROHAN SAI NALLA

Boulder, CO | [rohan.nalla@colorado.edu](mailto:rohan.nalla@colorado.edu) | [GitHub](https://github.com/r0han99)| [LinkedIn](https://www.linkedin.com/in/r0han99/)| [Website](https://www.mytesseract.dev/home)

# EDUCATION

**UNIVERSITY OF COLORADO BOULDER** Boulder, Colorado

*Master of Science in Data Science, CGPA:* 3.8/42022 - 2024

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 2018-2022

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

# INTERNSHIP

**Graduate Research Assistant** Boulder, Colorado

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

* Technology and Data backbone at the Laboratory.
* Designed and Developed cognitive Stimulus and Response experimentation in Psychopy integrated with Eyelink 1000
* Conceptualized an automation methodology using Deep Learning to collect data.

**Phoenix Global Pvt Ltd** Hyderabad, India

*Machine Learning Engineer Intern* Jun, 21 – Sept, 21

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.

# TECHNICAL PAPERS

# Comparative Study of Reliability of Transfer Learning to Classify Plant-Based Diseases [View Publication](https://www.ijeat.org/wp-content/uploads/papers/v10i6/F30800810621.pdf)

# *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](https://www.ijitee.org/wp-content/uploads/papers/v10i12/L957410101221.pdf)

*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.

# PERSONAL & ACADEMIC PROJECTS

**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.

# Global Temperature Variation Analysis and Modeling

* Led a team of 3 to conduct a detailed analysis of Average Temperatures of geographically diverse regions.
* Modeled the data to forecast temperatures in both quantified and time series formats using Facebook’s Prophet Algorithm.
* Deployed a dashboard to host all the analytical information along with the Prophet Functionality.

# 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.

**The Formula 1 Web Paddock**

* 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.

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# EXTRACURRICULAR

**Start it Up —**  *Author* [Blog Page](https://medium.com/@r0han_)

* 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.

# SKILLS

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

**Data Science and Machine Learning:** PyTorch, Tensorflow, Keras, Pandas, Numpy, Scikit-learn, Open CV, SQL

**Tools & Utility:** VS Code, KNIME, Notion, LaTex, Adobe Photoshop, Quarto, RMarkdown, API

**Disciplinary Skills:** Time Management, Multitasking

**Languages:** English, Telugu, Hindi

# INTERESTS

* A
* Astrophotography
* Reading