

Rahul Singh

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🔗 Education

Gannon University

Erie, PA

Computer and Information Sciences, Data Science **GPA:** 3.90

2021–2023

Coursework: Cloud Computing, Data-Centric Concept, Big Data, Data Visualization, Statistical Computing, Requirement Project Management.

Mumbai University

Mumbai, India

Information Technology **GPA:** 3.25

2016–2019

Coursework: Data Structure Algorithm, Python, Java, DBMS, PHP, C language, HTML, Digital Electronics, Operating Systems. ASP.NET.

Activities: Kaggle Scholar, Research on New and Upcoming technologies in Data Science, Organizer for cultural nights at university, Student Counselor for International admissions, and Machine Learning Enthusiast.

🔗 Experience

Gannon University

Erie, PA

Biomedical Lab Assistant

Aug 2022–Present

- AWS Deep Racer (On-Going)
 - Working on Deep Racer by utilizing Reinforcement Learning and appropriately adjusting the parameters to achieve the optimum outcome.
- Drone Programming using Convolutional Neural Network.
 - Conducted hand gesture detection that recognizes hands and executes the user's command.
 - Conducted facial detection by placing a marker on the user's face, which helped the drone find and follow the User.

Global Student Assistant

Oct 2021–Present

- Communicate with potential global Gannon students to guide them and update them on their admission.
- Utilize Perceptive Content software to check applicants' admission status and communicate accordingly.

🔗 Projects

Thyroid Detection

May 2022

- The project aims to create a prediction system that can determine whether a patient has a high or low risk of developing thyroid disease.
- The thyroid is a neck-based endocrine gland that produces hormones (FT3 and FT4) that are then released into the bloodstream.
- Major disorders may develop in either situation when the thyroid gland functions either above or below normal levels (hyperthyroidism with high hormone levels versus hypothyroidism with low hormone levels).
- Treatment for thyroid disorders is crucial for this reason.
- **Tech Stack:** Stream-lit, Random Forest, Scikit-Learn, Docker, CircleCi, mlops using MLflow, etc.

Wafer Fault Detection.

Jan 2022

- The goal of the project is to create a predictive system that can tell whether a wafer deployed across numerous sites is performing properly or is damaged.
- A wafer is a thin slice of semiconductor material used in the manufacture of integrated circuits and solar cells. In the existing situation, if a wafer is damaged, an individual must inspect every wafer available to identify the damaged one.
- The model seeks to identify the damaged wafer, avoiding inspection of all wafers present.
- **Tech Stack:** Python, Flask, XG Boost, Decision Tree, KNN, K-Means, Mongo DB, MLflow, etc.

Heart Failure (HF) Prediction using Machine learning

Sep 2021

- Predict the outcome of Heart Failure Using Correlations analysis, K-mean, Principal component analysis (PCA)
- Identify the key feature using machine learning classifiers, a patient's survival
- can be predicted based on important clinical features and got **88% accuracy**.


– **Tech Stack:** Python, Flask, Heroku, SQLLITE.


Web Crawlers for Image Data Sentiment Analysis and Product review Sentiment Analysis. Aug 2021

– Developed web scraper using Python to filter out the reviews from E-commerce sites like Flipkart.
– Performed methods such as post, get, filter out the reviews from the site, and successfully test and deploy it on a Cloud Platform like Heroku.

– **Tech Stack:** Python, Flask, Heroku, SQLLITE.

Skills

 **Expert:** Python, NumPy, Pandas, R, MySQL, SQL, Latex, Git/Terminal, Data Analysis/Visualization, Stream-lit, Keras, OpenCV, Matplotlib, Scikit-learn, Seaborn, NLTK, SciPy, Power BI, Jupyter, AWS GCP Services

 **Proficient:** C, SQL, HTML (Liquid), CSS, Java, JavaScript (React), Azure/AWS, WordPress, Git, Django, Flask, PyTorch, Amazon Lex.

 **Novice:** Linux, React JS, RASA NLU, ASP.NET, Flutter.

Awards

Hacker Rank Python Gold: 5 Star Problem Solver

Aug 2021 – Present

Hacker Rank SQL Gold: 5-Star Problem Solver

Aug 2021 – Present