Akash Borigi

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EDUCATION

Master of Science in Engineering Data Science   **Dec 2024**
University of Houston, Houston, TX, USA

Bachelor of Technology in Electronics and Computers Engineering   **June 2022**
Koneru Lakshmaiah Education Foundation, Vijayawada, AP, India   CGPA: 3.80

TECHNICAL SKILLS

Programming Languages: Python, R, SQL, Java
Database and Cloud Technologies: MySQL, MongoDB, PostgreSQL, AWS, Docker
Statistical Techniques: Regression, Classification, Clustering, Monte Carlo, Decision Tree, Random Forest
Data Frameworks: Pandas, NumPy, Matplotlib, Plotly, Scikit-Learn, TensorFlow, Keras, NLTK, Beautiful Soup
ML Environments: Jupyter Notebook, Google Colab, Orange Data Mining, R-Studio, Advanced Excel, Tableau, Power BI
Certifications: Cloud Computing (Huawei), Associate Artificial Intelligence (Huawei), PostgreSQL (Udemy)
Coursework: Text Mining, Machine Learning, Data Science, Probability and Statistics, Data Mining, Data Analytics

PROFESSIONAL EXPERIENCE

Antunes Lab, University of Houston, Houston, USA   **Jun 2023 - Present**
Jr. Data Scientist (Research Assistant) **|**
- Secured a seed grant from the Drug Discovery Institute, for benchmarking of peptide-based ligands.
- Deployed AI bots and algorithms to extract and wrangle large-scale datasets, reducing 50048 samples to 3976, enabling seamless data workflow for peptide screening.
- Administered Py-Rosetta (Monte Carlo Simulation) utilizing 957 structured data to develop a baseline strategy.
- Orchestrated 20 diverse scoring functions on a Docker platform to assess comparative binding site values of ligands and receptors and explored a workflow for identifying peptides concerning Machine Learning predictions.

University of Houston, Houston, USA   **Apr 2023 - May 2023**
AI Informative Engineer (Graduate Assistant) **|**
- Utilized proactive initiative for deploying responsive AI web program, applied Python and Microsoft Excel.
- Extracted efficient data from 86 journals and 180 conferences, consolidating all pertinent information into a centralized framework document using new technology for edge research.
- Facilitated streamlined access for 3 researchers, providing concise guidance for accessing publication information.

Trizag Technologies, Visakhapatnam, India   **Jul 2021 - Dec 2021**
Artificial Intelligence Analyst |
- Spearheaded deployment of raw honeybee data worked by SQL wields in Amazon web marketing resources ensuring streamlined information, with innovative AI web scraping and showcasing adaptability in cutting-edge technologies.
- Collaborated seamlessly for multiple tasks with a cross-functional team to enhance a diverse marketing agenda of 25% profits over 10 and above clients, leveraging esteemed support of LinkedIn and Facebook media partners.

PROJECTS and TRAINING

Pioneering the Drill using Comparative Predictions, (Apprenticeship)   **May 2023 - May 2024**
- Examined data science skillset upon energy transition co-powered and hosted by the National Science Foundation.
- Executed 2 data normalization and 3 transformation techniques to optimize an abstract data pipeline, resulting in a 17% enhancement in model performance of Linear Regression, Decision Tree, Random Forest, and KNN.
- Accomplished 92% of R-squared value for predicting rate of penetration through regression analysis using Random Forest on 7310 entries, employing randomized cross-validation techniques up to 10 splits.

Topic Modeling   **Aug 2023 - Dec 2023**
- Employed advanced text mining on newspaper corpus, and skillfully crafted a cluster model with a journalistic focus.
- Applied leadership skills to refine 50k words of data analysis, ensuring excellence in team and project management.

Information Visualization over Countries   **Aug 2023 - Dec 2023**
- Led on Tableau-dependent investigative analysis, revealing a positive correlation between economy and literacy.
- Provided interactive visualizations to engage diverse audiences and inspire action for future research, an identified transition from agriculture to service-based economies, and complex influences of health metrics and net migration.

PUBLICATIONS and SCHOLARSHIPS

Machine Learning Algorithms on Public Mental Health   **Mar 2022**
International Journal of Special Education (ISSUES PAGE) - Volume: 37, No: 3, ISSN: 0827-3383
MERIT ENGINEERING DEAN'S MASTER SCHOLARSHIP (University of Houston)