Ashutosh Rastogi

+1(716)5331090 | rastogi@buffalo.edu | linkedin.com/in/ashutosh-rastogi-04b172170/ | github.com/Rastogi-123

Education

Master's Degree (Computer Science and Engineering) | University at Buffalo | 12/2023 | Buffalo, NY

- Achieved top grades in Data Mining-I & II, Data Intensive Computing, and Biometric Image Analysis, showcasing mastery of advanced algorithms, scalable data processing, and biometric identification techniques.

Summary

Results-oriented data professional holding a Master's in Computer Science and Engineering. Proficiency in Python, R, SQL, and data analytics tools. Enhanced business processes through optimized statistical models and data-driven decision-making. Skilled in pattern recognition, actionable insight generation, and driving superior outcomes. Committed to leveraging data for continuous improvement and organizational excellence.

Academic Experience

Computer Vision Engineer | 02/2023 - 05/2023 | University at Buffalo-SUNY | Buffalo, NY

- Conducted literature review to optimize ear pictures as a biometric identifier, identifying research gaps and opportunities.
- Developed streamlined two-step algorithm using YOLOv8s and YOLOv8m-cls models for optimized ear detection and recognition.
- Created custom dataset for enhanced ear detection and annotation, achieving high precision and recall during model training.
- Evaluated model performance using precision, recall, mAP, top-1 accuracy, and top-5 accuracy, achieving competitive results in ear recognition compared to state-of-the-art models.

GitHub repository: https://github.com/Rastogi-123/BiometricImageAnalysis

Data Engineer | 01/2023 - 05/2023 | University at Buffalo-SUNY | Buffalo, NY

- Developed and implemented machine learning models (logistic regression, decision trees,random forests) for loan approval prediction, optimizing customer data analysis.
- Performed extensive feature engineering, preprocessing, and handling of missing values and categorical variables to enhance data efficiency.
- Presented actionable insights based on comprehensive analysis, optimizing loan approval processes and improving decision-making efficiency.
- Demonstrated strong analytical skills, attention to detail, and proficiency in handling large datasets, resulting in enhanced loan processing efficiency.

GitHub Repository: https://github.com/Rastogi-123/BankLoanPrediction

Data Analyst | 09/2022 - 12/2022 | University at Buffalo-SUNY | Buffalo, NY

- Led comprehensive analysis of flight delays using large-scale dataset from the United States Department of Transportation's Bureau of Transportation Statistics.
- Applied supervised learning techniques (Linear Regression, Principal Component Analysis, Ridge, Lasso Regression, Random Forest, and Support Vector Machine) for accurate Arrival Delay prediction.
- Utilized Python, R, SQL, and data analysis libraries (pandas, NumPy) for data manipulation, exploratory analysis, feature selection, and model training.
- Collaborated with a multidisciplinary team, effectively communicating findings and insights through data visualizations and contributing to strategic recommendations for cost efficiency and operational performance improvement in the aviation industry.

GitHub repository: https://github.com/Rastogi-123/Statistical-Data-Mining-I

Skills

Languages: C/C++, Python, R, SQL

APIs & Libraries: OpenCV, Keras, NumPy,Scikit-Learn, TensorFlow

Database & Web Development: MS-SQL, SQLite, NoSQL(Pouch/Couch), HTML/CSS

Tools: Anaconda Navigator, Gazebo, Tableau, Eclipse, Power BI, ETL (Extract, Transform, and Load)

Awards & Involvement

Membership Lead: Gurukul Student Chapter, Gurukula Kangri University | 08/2018 - 06/2022

- Led and optimized growth of Gurukul Student Chapter, driving impactful initiatives and fostering collaboration for data science success. Leveraged Python, R, and SQL to develop data-driven strategies and enhance efficiency. Organized workshops, seminars, and competitions, promoting knowledge sharing and skill development among members for aspiring data professionals.