NISCHAY SAI CHERUKURI

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EDUCATION

The George Washington University **Washington, DC**
Master of Science in Data Science **May 2024**
Relevant Coursework: Data Mining, Data Warehousing and Visualization, Machine Learning, Cloud Computing, Linux for DevOps

Malla Reddy College of Engineering **Hyderabad, India**
Bachelor of Technology in Computer Science & Engineering **July 2022**
Relevant Coursework: C, C++, Database Management Systems, Data Structures and Algorithms, Java, Operating Systems

TECHNICAL SKILLS

Programming Languages & Tools : Python, R, MySQL, TensorFlow, GitHub, Git, ETL, PySpark, TensorFlow, Hadoop
Machine Learning : Data Pre-processing, Statistical Modelling, Linear and Tree-Based Models, Deep Learning
Visualization : Tableau, Plotly, Matplotlib, Seaborn, MS Excel
Cloud Computing and Databases : Amazon Web Services (AWS), Azure, MySQL, MongoDB
Expertise : Statistical Analysis, Data analysis and pre-processing, Data visualization, Data Modelling, Time Series Forecasting, Object Detection using YOLO, Natural Language Processing

WORK EXPERIENCE

The George Washington University, USA — Student Communications Assistant **March 2023 - Present**
- Managed and optimized content across GW Engineering and departmental websites using HTML and Drupal.
- Implemented SEO strategies, achieving a 7% increase in overall website score and enhancing key metrics.
- Analyzed website data to inform content strategy and align with user behavior trends.
- Collaborated with the communications director and academic staff to ensure cohesive communication strategies.

UberGrad — Data Science Intern **May 2021 – September 2021**
- Developed and optimized machine learning models for categorizing universities, enhancing student application recommendations, and improving accuracy by 20%.
- Utilized data and predictive analytics to discern sales trends and anticipate future course demand, contributing to a 25% increase in sales and strategically influencing course development and pricing strategies.
- Reduced data processing times by 15% by migrating workflows to AWS and optimizing resources.
- Collaborated with teams, sharing insights that improved strategic planning and operational efficiency.
- Enhanced the U-SURE PRO engine by integrating 20+ profile parameters, ensuring tailored university recommendations for users, and considering factors like specialization, work experience, and research background.
- Played a pivotal role in improving AI-enabled test preparation courses, like GRE and IELTS, by incorporating real-time feedback mechanisms, ensuring students received dynamic and up-to-date preparatory material.

TECHNICAL PROJECTS

SudoSolveAI: Dynamic Sudoku Deciphering with Deep Learning and OpenCV| OpenCV, TensorFlow (Link) **July 2023**
- Attained 98% accuracy in real-time digit recognition from video and accurate extraction from Sudoku grids using a designed CNN with TensorFlow and OpenCV's image processing.
- Efficiently solved Sudoku puzzles in real-time, enhancing user interaction and solution verification by overlaying solutions on live video grids with a robust backtracking algorithm and OpenCV.

Walmart Sales Forecasting using Time Series Analysis | Python, stats models, Prophet (Link) **March 2023**
- Engineered feature pipeline and multiple time series models, including ARIMA, SARIMAX, and Garch to predict Walmart sales. Evaluated model fitness through metrics like AIC and adjusted R2.
- Employed statistical tests including ADFuller for stationarity and conducted variance analysis to discern sales behaviors during distinct holidays like Christmas and Thanksgiving, unveiling significant seasonal sales trends which were leveraged to refine the forecasting models.

BioMedSeqNet: Advanced NLP Strategies for Sentence Classification | TensorFlow, NLP (Link) **Dec 2022**
- Attained 80% accuracy in categorizing PubMed 200k RCT dataset abstracts into segments (e.g., Objective, Methods, Results, Conclusions) Leveraging enhanced NLP models.
- Spearheaded the development of NLP models, leveraging LSTM Bidirectional layers and integrating pre-trained token and character embeddings with a compact tribrid embedding model, increasing nuanced sequence interpretation and precise classification of biomedical abstracts.

Smart Health Predictor: A Multifaceted Disease Analysis and Forecast Model | Python, sci-kit learn (Link) **Mar 2022**
- Developed machine learning models to predict with 85% accuracy the occurrence of diseases, including cancer, diabetes, and heart problems, thereby streamlining diagnostics, and fortifying preventative healthcare strategies.
- Developed a streamlined ETL pipeline to manage and optimize intricate health datasets, facilitating real-time disease prediction analytics and ensuring expedited and accurate health risk assessments across various conditions.

PUBLICATIONS

- **A Detailed Examination of MongoDB and MYSQL (Paper Link).** **October 2021**
- **A Comprehensive Study of Various Sorting Algorithms (Paper Link).** **August 2021**
- **A Brief Survey and Examination of Various Searching Techniques (Paper Link)**. **July 2021**

CERTIFICATIONS

- **AWS Certified Solutions Architect – Associate (Link)**. **October 2023 – October 2026**