Krishna Thakar

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Technical Skills:

- **Programming Languages**: Python, R, Java, JavaScript, HTML, CSS, SQL (PostgreSQL, MySQL), MongoDB
- **Frameworks & Libraries**: Pandas, NumPy, Scikit-learn, Matplotlib, Seaborn, Plotly, Streamlit, OpenCV, NLTK, Hugging Face Transformers, TensorFlow, PyTorch, Keras, CUDA, LSTM, CNN, RAG LLM
- **Tools and Platforms**: Snowflake, Databricks, AWS (EC2, S3, PVS), Azure, Docker, Kubernetes, Git, Linux, CI/CD pipelines

Education:

- Undergraduate in Computer Science w/ Minor: Data Science – 3.9 GPA   May 25'
  Southeast Missouri State University
  Dean's List x 6 | President's List x 4
- Coursera Certifications:
  Supervised Machine Learning: Regression and Classification - Deeplearning.AI <Link>   Feb 24'
  Exploratory Data Analysis for Machine Learning – IBM <Link>   June 24'

Job Experience:

Undergraduate Student Researcher – Southeast State Missouri University <Research Link>   Jan 25' – April 25'

- Worked under the mentorship of Dr. Mohamed Abu Sheha and Dr. Emmanuel Thompson, comparing traditional ML models and deep learning models against fine-tuned RoBERTa for three-way sentiment classification.
- Processed ~7 million Yelp reviews, performing text cleaning, tokenization, lemmatization, negation handling, vectorization, and balancing sentiment classes into equal thirds.
- Developed and evaluated multiple models - including Logistic Regression, SVM, Naïve Bayes, Random Forest, BiLSTM, LSTM, CNN, RNN, GRU, and a fine tuned RoBERTa - using stratified cross validation, confusion matrices, and ROC curves to measure accuracy, precision, recall, F1, and ROC AUC.
- Demonstrated that RoBERTa achieved top performance (accuracy 0.80, AUC 0.93) through systematic cross-validation and in-depth analysis.

Information Technology Staff – Southeast State Missouri University   Sept 23' – Jan 25'

- Provided front-line technical support to 100+ students and faculty, resolving issues with software, printing, and system functionality at an on-campus IT help desk.
- Diagnosed and troubleshot Windows/macOS PCs, maintaining operational efficiency across 50+ public access computers.

Projects:

StealthChess.AI – Secret Cheating Chess Assistant | OpenCV, YOLOv8, Stockfish, Meta Ray–Ban Glasses <Link>   April 2025

- Engineered a real-time chess AI that analyzes live streams from Meta Ray-Ban smart glasses, detecting boards and pieces with YOLOv8 and whispering Stockfish recommended moves into an earpiece.
- Improved detection accuracy by 30% by training custom YOLOv8 models and implementing precision grid mapping for live, noisy video feeds.
- Designed and optimized a full-stack ML pipeline for real-time inference, including model deployment, live video preprocessing, object detection, and post-processing for actionable decision-making

ASA DataFest 2025 – Winner, Best Use of Statistical Analysis | R, RStudio: <Link>   April 25'

- Worked with a real-world dataset of 200,000+ U.S. office lease transactions (2018–2024) from Savills, focusing analysis on tech-sector leases larger than 10,000 sq. ft. to extract meaningful business insights, and framed meaningful research questions
- Conducted exploratory data analysis and built Logistic Regression, Decision Tree, and Random Forest models in R to predict tenant movement; identified space type, lease year, and square footage as top predictors.
- Presented findings and model outcomes on stage with a team of 4, earning Best Use of Statistical Analysis at ASA DataFest 2025 (18-team, 24-hour competition) for impactful insights and model interpretability.

SEMO Esports Website | React, Node.js, MongoDB, Express, Tailwind, Git: <Link>   June 24'

- Developed and deployed a full stack booking system using AWS, React, Node.js, and MongoDB, enabling over 150+ students to reserve gaming stations in advance, reducing on-site congestion by over 70% during peak hours.
- Integrated Firebase Authentication and role-based access controls, streamlining user access and empowering staff to manage reservations, usage stats, and maintenance through a dedicated admin panel.