

# Krishna Thakar

[krsnathkr.github.io](https://krsnathkr.github.io) | (858)-408-5293



## Technical Skills:

[krsnathkr@gmail.com](mailto:krsnathkr@gmail.com) | [LinkedIn](#) | [GitHub](#)

- **Programming Languages:** Python, PostgreSQL, HTML, CSS, JavaScript, Java, R
- **Tools:** Pandas, Scikit-learn, PyTorch, TensorFlow, HuggingFace Transformers, NLTK, Matplotlib, Seaborn, Plotly, Streamlit, OpenCV
- **Relevant Courses:** Data Analytics, Discrete Structures, Machine Learning, Adv Artificial Intelligence, Database

## 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 2025

- 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.

### [Student Research Conference 2025](#) – Presenter, Sentiment Classification Using ML & Deep Learning: [\[Link\]](#) April 2025

- Worked under the mentorship of Dr. Mohamed Abu Sheha and Dr. Emmanuel Thompson, comparing traditional ML models (SVM, Random Forest) and deep learning models (CNN, BiLSTM) against fine-tuned RoBERTa on a 20,000-sample Yelp review dataset for three-way sentiment classification.
- Improved training and evaluation time by 25% by designing an efficient text preprocessing pipeline and applying TF-IDF, Word2Vec, and BERT embeddings selectively based on model type.
- Focused on model architecture trade-offs, evaluation metrics like AUC and F1, and demonstrated experience tuning both classical ML and deep learning models for large-scale NLP tasks.

### [Echo Chamber](#) | Python, Streamlit, NewsAPI, NLTK, Sklearn: [\[Link\]](#) June 2024

- Created a platform that identifies sentiment bias in news articles using NLP techniques and recommends balanced articles through a TF-IDF-driven recommendation system.
- Focused on end-to-end ML system development, covering real-time text classification, recommender systems, user feedback integration, and model performance evaluation at production scale.

## Education:

### Undergraduate in Computer Science w/ Minor: Data Science – 3.97 GPA May 25'

Southeast Missouri State University

Dean's List - Fall 22, Spring 23 & Spring 24 | President's List - Fall 22, Spring 23 & Spring 24

#### 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:

### Resident Assistant – Southeast State Missouri University Jan 23' – May 25'

- Developed strong relationships with 60+ residents by actively listening to their concerns and effectively communicating essential information about campus resources, policies, and procedures. And organized and led 10+ community-building events per year, increasing resident participation and fostering a more inclusive and engaged environment.

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

- Provided prompt and efficient technical support to over 100 students and staff, resolving hardware and software issues.
- Managed the IT inventory for the lab, keeping track of all hardware and software assets and ensuring proper licensing and compliance.