

Bhavya Kandhari

[Email](#) | [LinkedIn](#) | [GitHub](#) | [Portfolio](#)

EDUCATION

Arizona State University

Master's in Computer Science CGPA: 3.92/4

Tempe, Arizona

Aug 2023 - May 2025

Amity University

Bachelor of Technology in Computer Science CGPA: 8.17/10

India

Aug 2017 - May 2021

EXPERIENCE

Technology Consultant (Data Analyst)

Sep 2021 - July 2023

Ernst & Young, Global Delivery Services

India

- Spearheaded development and quality improvement of KPIs and lead discussions across 6 different functions over a 1 year period to contextualize and define cyber-security metrics, resulting in enhancement in KPI Quality.
- Designed upper and lower thresholds by implementing statistical and time series models to catch anomalies in data quality to increase the efficiency of launching investigations by 20%.
- Developed and clearly documented automation development of processing IP addresses and finding organizational information using AWS Redshift, Glue, Lambda and Secret Manager to reduce process cycle time by 1.5 hours/day.
- Created column profile of data quality utilizing AWS Glue ETL pipeline and displayed statistical information regarding data distribution through AWS Quicksight for quality monitoring and improvement.
- Accomplished approximately 65% mapping of the CVEs from NVD Database to MITRE framework by integrating CAPEC database to model adversaries tactics and techniques.

TECHNICAL PROJECTS

Simplified Alignment in LLMs | [Link](#) | *Trl, Transformers, Torch*

Aug 2024 - Dec 2024

- Implemented Direct Preference Optimization (DPO) on the Meta Llama models using the ELI5 dataset, achieving a 6% improvement in reasoning accuracy.
- Preprocessed and tokenized datasets for alignment, structuring question-response pairs to optimize input for clarity and coherence.
- Evaluated performance using GSM8K (mathematical reasoning) and MMLU (multi-domain reasoning) benchmarks, balancing reasoning depth and user-friendliness.
- Analyzed trade-offs between simplicity and reasoning depth, providing insights into improving LLM alignment for diverse real-world applications.

Video Reconstruction from Randomized Frames | [Link](#) | *OpenCV, Numpy, Matplotlib*

Nov 2023 - Dec 2023

- Engineered a preprocessing solution that reduced video data complexity through grayscaling and downsampling.
- Enhanced feature detection accuracy by adapting ORB and SURF algorithms, optimizing the frame reordering process for video sequences. Developed and tested 3 sorting algorithms to efficiently sequence video frames based on number of feature matches.
- Implemented a logistic and sequential performance metric that demonstrated improvement in frame sequencing accuracy compared to existing methods.

TECHNICAL SKILLS

Languages: Python, JavaScript

Frameworks: React, Node.js, Express.js, Mongoose

Data Visualization Tools: Power BI, AWS Quicksight, Tableau

Databases: PostgreSQL, MongoDB

Cloud Computing: Amazon Web Services

Libraries: Scikit-Learn, Pandas, NumPy, PySpark, Seaborn, Plotly

Developer Tools: Git, Postman (API Testing), JSON