





# Lokeshwar Reddy Karra



|  [github.com/lokeshkarra](https://github.com/lokeshkarra) |  [linkedin.com/in/lokeshkarra](https://www.linkedin.com/in/lokeshkarra) |  <https://x.com/melokeshkarra> |

|  [lokeshwarreddy.karra@gmail.com](mailto:lokeshwarreddy.karra@gmail.com) |





## WORK EXPERIENCE

- **Data Analytics Extern — Webacy:** 09/2024 – 10/2024
  - Web3 Security Data Analytics Externship
  - Analyzed 38+ risk metrics across **967 smart contracts** to identify vulnerabilities and improve Web3 security.
  - Built and validated datasets with **99% accuracy** for risk categorization using **SQL and Excel**.
  - Created dashboard in spreadsheet to visualize chain-specific risks, leveraging correlation ( $\Phi < 0.1$ ) and frequency analysis.
  - Conducted clustering (**K-Modes, Hierarchical**) to group 900+ contracts by risk, enabling enhanced profiling.
  - Delivered actionable insights, reducing risk assessment time by 30%.

## RESEARCH WORK

- **Enhancing Abstractive Text Summarization with Proximal Policy Optimization:** 
  - Proposed a novel PPO-based model integrating an encoder-decoder architecture, achieving a **40% improvement** in summarization accuracy.
  - Benchmarked on the **CNN/Daily Mail dataset** with applications in news aggregation and report generation. (ICAECT - 2024)
- **Enhancing Medical Imaging: Noise Reduction and Super Resolution with Transfer Learning:** 
  - Enhanced chest X-ray resolution by **3x using SRGAN and transfer learning**, achieving superior PSNR and SSIM scores.
  - Applications include telemedicine and diagnostic imaging. (IDCIoT - 2024)

## PROJECTS

- **TopPizza:**  | 
  - Designed and developed a full-stack pizza ordering website using **React** (frontend) and **Node.js with SQLite** (backend).
  - Reduced the back-end **cold start time by 98%**, from **3 minutes to 3 seconds**, improving user experience
  - Developed **RESTful APIs** using **Fastify** and SQLite, handling order management, pizza listings, and user sessions.
  - Deployed the backend on **Render** and the frontend on **Netlify**, optimizing for a seamless and cost-effective deployment.
- **TwitterSpacesAiBot (Python):** 
  - Developed an automated bot to process **Twitter Spaces** audio content for **transcription and summary**.
  - Downloads audio with **twspace-dl**. Transcribes using AssemblyAI API
  - Summarizes content via **Ollama LLaMA2 model**. Tweets summaries using Tweepy.
  - Reducing manual effort, and enhanced accessibility and engagement with concise summaries of Twitter Spaces content.
- **OpenInApp iOS Application:** 
  - Developed an iOS app with **tab bar navigation** to showcase links, courses, and user profiles.
  - Integrated **API** to display top/recent links, total clicks, and other metrics.
  - Implemented a **dynamic chart** to visualize monthly clicks data.




## EDUCATION

- **Amrita Vishwa Vidyapeetham** Chennai, India
  - Bachelor of Technology - Computer Science and Engineering (AIE)* 2020 - 2024
- **Narayana Junior College** CGPA: 8.9
  - Intermediate (HSE)* 06/2020
- **Krishnaveni High School** CGPA: 9.75
  - High School* 06/2018

## SKILLS SUMMARY

- **Languages:** Java, Python, Swift, javascript (Node.js), SQL
- **Frameworks:** Spring Boot, Express.js, SwiftUI, TensorFlow, Keras, Pandas, OpenCV, Flask
- **Tools:** Eclipse, Vs Code, MySQL, GIT, Docker, Postman, Jupyter Notebook, Kaggle, Colab, Matlab
- **Platforms:** AWS Cloud, Ubuntu, Windows
- **Key Skills:** Backend Development, API Design, Cloud Deployment, Natural Language Processing (NLP), Reinforcement Learning, Generative Adversarial Networks (GANs), Data Analytics

## CERTIFICATIONS / ACHIEVEMENTS

- **AWS Academy Graduate - AWS Academy Cloud Architecting:** 
- **HackerRank Java (Basic):** 
- **Achieved 5 star in Java problem solving in HackerRank**  :
- **Achieved 5 star in SQL problem solving in HackerRank:** 