NARESH **KOLLU**

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EDUCATION

Southeast Missouri State University   Cape Girardeau, MO
Master of Science in Applied Computer Science   May 2025

Gudlavalleru Engineering College   Vijayawada, India
Bachelor of Technology in Computer Science and Engineering   May 2022

CERTIFICATIONS
CCNAv7 | Introduction to Networks   2021
IBM | Python 101 for Data Science   2021
Intershala | Web Development Training   2020

TECHNICAL SKILLS

Programming Languages: Python, C++, JAVA, HTML/CSS/JavaScript, SQL
Frameworks: React JS, Apache Hive, Spark
Cloud Platforms & Services: Microsoft Azure, Cloud Computing, AWS
Tools: Snowflake, Visual Studio, Tableau, Power BI
OS: Windows, Ubuntu, Linux

PROFESSIONAL EXPERIENCE

The Bank of Missouri   Perryvilly, MO
Data Analyst Intern   June 2024 – August 2024
- Designed and integrated a complex chatbot system in collaboration with the data governance team, using user journey and empathy maps to enhance user experience. Integrated with Snowflake's Data Cloud through SQL and Python, streamlining data administration.
- Utilized Snowflake for advanced data integration and analytics and created dynamic dashboards with Power BI. Enhanced user engagement and showcased chatbot capabilities with features like dynamic buttons and auto correct.
- Optimized transaction processing and customer service with a Snowflake Cortex, Python, and Streamlit LLM, providing a personalized user experience with the ability to recall previous interactions.
- Highlighted chatbot performance using Snowflake reports and improved data management with Power Query and M, supporting enhanced data-driven decision-making.

Cognizant Technology Solutions   Chennai, India
Software Engineer Trainee   March 2023 - August 2023
- Researched Google's P3 investments, leveraging advanced data analytics and machine learning techniques to develop expertise in financial modeling and analysis using C++.
- Utilized advanced data analytics for investment decision-making, optimizing strategies.
- Prepared detailed financial reports and presentations, effectively communicating findings.
- Applied theoretical knowledge to practical scenarios, delivering informed investment recommendations.

Cognizant Technology Solutions   Hyderabad, India
Programmer Analyst Trainee   February 2022 - July 2022
- Developed a user-friendly Employee Management System using HTML, CSS, JavaScript, Spring Boot, and Java.
- Implemented RESTful API endpoints, user authentication, and database administration.
- Ensured system reliability through unit and integration testing.
- Collaborated with stakeholders to gather feedback and refine system functionality.
- Successfully deployed the system into production environment.

PROJECTS

Chatbot Development using Snowflake   2024
- Developed a RAG-based LLM assistant with Streamlit, Snowflake Cortex, and Python, creating a 24/7 AI chatbot that reduced response times by 40% and saved $50,000 annually. Utilized SQL for data querying and integration.
- Built interactive dashboards using Snowflake and Python, enhancing real-time data insights and decision-making. Boosted productivity by 20%, saving 15 hours weekly per employee through effective use of SQL for data manipulation.
- Streamlined internal processes with Snowflake's data tools, optimizing workflows and achieving $70,000 in annual savings through increased efficiency and automation. Applied Python for scripting and SQL for data management.

Implementation of Face Recognition Attendance System   2022
- Led the development and deployment of a Face Recognition System, collaborating with a team of 6 for seamless integration with attendance systems.
- Applied cutting-edge facial recognition algorithms such as Convolutional Neural Networks (CNN) and OpenCV for optimal performance.
- Ensured compatibility and scalability by interfacing with the existing infrastructure.
- Reduced manual attendance errors by 27% through system implementation.
- Implemented real-time monitoring using Python and TensorFlow, revealing attendance trends and improving data accuracy by 27%.
- Addressed challenges related to lighting, angles, and facial expressions to ensure robust system functionality.
- Resolved complex issues with the attendance database and system integration using SQL, demonstrating expertise in face recognition and biometrics.
- Enhanced attendance tracking efficiency, significantly reducing administrative workload.

Speech Based Emotion Recognition Using Machine Learning   2021
- Collected happy, sad, and furious noises to evaluate the model's resilience. Enhancements in data quality and quantity were achieved by noise reduction, audio segmentation, and data augmentation.
- Utilized Convolutional Neural Networks (CNNs), Recurrent Neural Networks (RNNs), and Support Vector Machines (SVMs) to determine the most effective emotion recognition method.
- Used Cross-validation and hyperparameter adjustments to improve the generalization of the selected model on the dataset.
- Assessed the model's accuracy, precision, recall, and F1 score. This assisted the algorithm in categorizing genuine emotions experienced in real-life situations.
- Model accuracy: 85%. The real-time emotion analysis program highlighted its applicability.

RESEARCH PAPERS

Speech2Emotion: Intensifying Emotion Detection Using MLP through RAVDESS Dataset (**IEEE)**
Safeguard Automation of Railway Using IOT ISSN: 2347-8578 – Volume 7 Issue 6, Nov - Dec 2019 (**IJCST)**
Speech Based EMOTION RECOGNITION Using MACHINE LEARNING (**IJAEMA)**

COLLEGE EXPERIENCE

Southeast Missouri State University   Cape Girardeau, MO
Data Entry Student Worker   November 2023 - Present
- Support the Technology Coordinator in data management within the Admissions CRM (Element451).
- Enter and update student information, resolve duplicate records, and aid in bulk mailing tasks
- Contribute to the accuracy of user data for successful recruitment efforts.

Student Ambassador   September 2023 – December 2023
- Represented new students and parents, offering insightful guidance about our university premises.
- Welcome incoming visitors and contribute to the positive office culture surrounding prospective students.
- Assisted in the organization of special events that enrich campus life, including 'Show Me Day' events, where I display the vibrant aspects of our university and facilitate a memorable experience for all attendees