VAISHALI KONDOJU

[Portfolio](https://vaishali-kondoju-portfolio.netlify.app/) | [kondojuvaishali98@gmail.com](mailto:kondojuvaishali98@gmail.com) | [LinkedIn](https://www.linkedin.com/in/vaishali-kondoju-787307136/details/projects/)

# Education:

**Indiana University,** Indianapolis, IN, USA 3.8/4.0 GPA

*Master of Science in Applied Data Science Aug 2023 - May 2025*

**Jawaharlal Nehru Technological University, Hyderabad, India** 9.53/10 CGPA

*Bachelor of Technology in Computer Science and Engineering Aug 2015 – May 2019*

# Experience:

**Project Lead & Graduate Research Assistant, Indiana University,** Indianapolis, IN, USA Aug 2023 – Present

* **Leading the Knowledge Indiana Project Team**, overseeing research initiatives and coordinating data analytics efforts, including managing information through **WordPress** and working on various **test cases in the Indianapolis Wikipedia**.
* Worked on The Polis Center website for user testing, identifying usability issues and improving navigation efficiency.
* **Applied GIS techniques** in **ArcGIS** to analyze and manage geographic data for **urban studies**, optimizing spatial data workflows and improving accessibility for policymakers.

**Systems Engineer, Tata Consultancy Services,** Hyderabad, India Aug 2022 - July 2023

* Developed **Python scripts** to extract, process, and visualize real-time network performance metrics, **reducing report generation time from 2 hours to 10 minutes,** accelerating business decision-making and improving operational visibility by **40%**.
* Designed and optimized **SQL scripts to fetch, validate, and preprocess network device** lists, reducing data inconsistencies by **95%** and ensuring accurate processing for downstream operations.
* **Automated network device discovery and polling** by developing a **Perl script,** increasing monitoring efficiency by **80%** and reducing manual effort by over **50** hours per month, enhancing network reliability.

**Software Engineer**, **Optum Global Solutions (UHG),** Hyderabad, India Aug 2019 - Aug 2022

* **Developed a Python-based automation tool** tomock healthcare claims from the production to the test environment, enabling testers to validate real-world data scenarios and **reducing manual test case creation time by 70%.**
* **Contributed to the development of a web-based portal** that fetched and displayed healthcare data from PL/SQL, enabling the business team to track data without direct database access. Worked on **HTML, CSS, and PL/SQL** queries, along with TypeScript for data mapping, ensuring seamless integration with APIs and **improving accessibility by 60%.**
* **Engineered and optimized SQL queries and stored procedures** to process **837 healthcare claims data**, improving claims processing efficiency by **90%**.

# Technical Skills:

* **Languages and Databases**: Python, Java, C, R, Perl, Oracle PL/SQL, Spark SQL.
* **Web development/Cloud**: HTML, CSS, PHP, JavaScript, XML, React.
* **ML libraries**: NumPy, Pandas, Matplotlib, Seaborn, Plotly, Scikit Learn, PyTorch, TensorFlow.
* **Technologies**: Geographic Information Analysis (GIS), Machine Learning (ML), Deep Learning (DL), Data Analytics, Data Science (DS), Business Intelligence (BI).
* **Tools**: Git, Jenkins, Unix/Linux, VScode, Eclipse IDE, Postman, Excel, VBA, PowerPoint, Tableau, ArcGIS.
* **Computer Science Fundamentals**: Data Structures & Algorithms, Object-Oriented Programming (OOP), Operating Systems, Design Analysis, software Development Life Cycle (SDLC).

# Projects**:**

1. **Employee Tracking System – 3-Tier Web Application |** *HTML, CSS, PHP, JavaScript, SQL, DMBS principles*

* Designed and implemented a secure, **role-based employee management** system with four user types—HR, Manager, Employee, and Super Admin—enhancing organizational efficiency and HR process visibility.
* Developed user modules for login, registration, attendance tracking, leave management, and training workflows, supporting **CRUD** operations and real-time data access.
* Created an admin dashboard for HR and Super Admins to manage employee profiles, assign tasks, and generate summary reports, streamlining operations across departments.
* Hosted on **IU Apache server** using Linux environment for deployment, **enabling real-time testing** and validation of system functionalities.

1. **BRFF Nutrition Obesity Database Design |** *SQL, DMBS principles*

* Designed and implemented the BRFSS Nutrition Obesity database using **SQL Developer** and Draw.io for **ER diagram**, creating a normalized database schema to store and analyze nutrition and obesity data from **10,000 respondents**.
* Leveraged **DBMS principles (normalization, indexing)** to optimize database performance and reduce redundancy, leading to more streamlined data operations.

1. **CineMatch: Personalized Movie Recommendation System |** *Python, ML, Spark SQL, Flask, HTML, CSS, JavaScript*

* Developed a personalized recommendation engine using **Python, Scikit-learn, TF-IDF vectorization, and cosine similarity**, analyzing **5,000+ IMDB movies** to enhance content discovery across streaming platforms.
* **Built a web application** with **Flask, JavaScript, HTML, and CSS**, enabling dynamic user interactions, while leveraging **NumPy, Pandas, and Seaborn** for data analysis and optimizing recommendation accuracy by **30%**.

# Certifications:

* IBM Data Science & AI Certificate