

# Sowmya Kothwalgudem

+1(904)439-0473 | Boston, MA | [kothwalgudemsowmya@gmail.com](mailto:kothwalgudemsowmya@gmail.com) | LinkedIn - /sowm-yaa/ | GitHub - /krishnasowmya99

## EDUCATION

### UNIVERSITY OF DAYTON

Master of Science – Computer Science

Dayton, OH

May 2023

Relevant Coursework: Adv. Programming & Data Structures, Algorithm Design, Database Management Systems Data Science and Deep Learning, Image Processing/Advanced Computer Vision.

## WORK EXPERIENCE

### DXC Technology

Hyderabad, India

#### Software Engineer

Jun 2020 – May 2021

- Crafted intricate SQL queries and Python scripts in a Big Data environment for Microsoft, yielding a 30% reduction in query execution time.
- Spearheaded data engineering initiatives, including data ETL processes, resulting in a 20% improvement in data quality and consistency.
- Orchestrated the migration from legacy on-premises systems to AWS, capitalizing on services such as AWS Lambda, EC2, S3, and RDS, achieving cost savings of 25% and empowering dynamic resource scaling in response to demand.
- Pioneered the integration of third-party data sources into our systems by architecting REST API endpoints, broadening our data portfolio, and facilitating real-time insights.

### Mahindra Rise

Hyderabad, India

#### Software Developer Intern

July 2019 – Jun 2020

- Leveraged R and Python (NumPy, Pandas) to develop and implement data-driven algorithms, resulting in a 20% improvement in decision-making processes.
- Established and maintained database systems using MS SQL and PostgreSQL, ensuring a 25% increase in data storage efficiency and seamless integration with applications.

## PROJECTS

### ProJango CRM: Empowering Customer Data Management

Nov 2023

- Orchestrated the development of a dynamic CRM application using Django, resulting in a 30% increase in the efficiency of customer data management and enabling users to execute over 500 CRUD operations seamlessly.
- Spearheaded the creation and meticulous management of 100+ user accounts within ProJango, showcasing advanced user management skills and enhancing overall system accessibility.

### JARVIS A.I

Oct 2023

- Engineered and deployed a voice-activated AI assistant, attaining a 95% accuracy rate in recognizing and processing user commands via speech recognition technology.
- Enhanced user engagement with seamless web browsing integration, resulting in a 30% reduction in manual searches, and optimized daily operations, saving users 15 minutes per day, enhancing productivity and convenience.

### KPMG AU Data Analytics (Virtual Internship)

July 2023

- Assessed data quality, pinpointed valuable customer segments through demographic and attribute analysis, and harnessed Python and Tableau for impactful data visualization and insights.

### Fake News Detection

May 2023

- Executed and calibrated a Bidirectional Neural Network and LSTM-based deep learning model for proactive fake news detection, slashing manual media review requirements by 75%.
- Delivered unparalleled model proficiency, clocking in at a remarkable 98% accuracy, surpassing baseline models by an impressive 50%.

## TECHNICAL SKILLS

**Languages:** Python (NumPy, SciPy, Matplotlib, Pandas), R, SQL, JavaScript, HTML, CSS

**Databases/Tools:** MS SQL, PostgreSQL, MongoDB, DynamoDB, Snowflake, Tableau/Power BI

**Cloud Platforms:** AWS (EC2, S3, Lambda, IAM, Athena), DataBricks

**Frameworks/Version Control Systems:** Flask, Django, Streamlit, Spark, PySpark, Docker, Git

## ACHIEVEMENTS AND CONTRIBUTIONS

**Certifications:** AWS Certified Cloud Practitioner

**Awards:** Academic Merit Scholarship (University of Dayton)

**Campus Involvement:** HR Student Assistant and Cataloging Assistant at the University of Dayton, supporting diverse administrative and data management tasks.