

Uma Kornu

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SKILLS

Certification: AWS Certified Cloud Practitioner, Alteryx Foundational, Alteryx Designer Core, Introduction to Generative AI - GCP

Developer Tools: Jira, Confluence, Microsoft Office, GitHub, R-studio, Power BI, Tableau, Apache Kafka, Snowflake, Kubernetes

Programming Languages: Python(Pandas, NumPy, Scikit-learn, TensorFlow, PyTorch, Keras, OpenCV, Matplotlib), R, SQL

Others: Data modeling, Data Extraction, Hypothesis testing, A/B Testing, Natural Language Processing, LLM, Selenium

Data Systems: MySQL, Postgres SQL, Hadoop, MongoDB, Microsoft SQL Server, NoSQL, Neo4j

Cloud Computing: AWS(S3, EC2, Redshift, Athena), Google Cloud Platform (GCP), Azure

EXPERIENCE

Georgia State University

Atlanta, GA

Data Science Research Assistant

February 2024 - Present

- Constructed hypergraphs from Stack Overflow blog network data using Graph Embeddings to capture user-content relationships.
- Employing algorithms such as PageRank and Louvain Modularity to model information diffusion across hypergraphs and conducting simulations on these generated hypergraphs to identify the most proficient users in Stack Overflow within various domains.

Institute for Insight

Atlanta, GA

Data Science Graduate Research Assistant (AV Group)

August 2023 - December 2023

- Constructed predictive models like Decision Trees and XGBoost, achieving an accuracy of 82%. Analyzed strategies to enhance customer sales closure rates through statistical modeling and Optimized inventory levels to maximize **profit by 5%**.

Data Science Graduate Research Assistant (South Star Energy)

August 2022 - April 2023

- Streamlined advanced feature selection techniques to identify critical features and implemented ML algorithms, such as Support Vector Machine and Logistic Regression, for call center data analysis, enhancing efficiency and **reducing customer wait times by 20%**.
- Leveraged SARIMA model for forecasting call volume, achieving a **30% surge in call handling capacity**, enhancing customer satisfaction.

Honeywell

Atlanta, GA

Data Engineer Intern

May 2023 - August 2023

- Facilitated the maintenance of an **ETL pipeline**, increasing efficiency by 25%, to extract, transform, and load data from fire panels and detectors into **Microsoft SQL Server** for improved storage and analysis.
- Partnered with cross-functional teams to analyze reports and build interactive **Tableau** dashboards for effective communication of data driven insights to stakeholders, resulting in a 10% acceleration of project timelines.

Ernst & Young LLP

Bengaluru, Karnataka

Senior Consultant

January 2022 - August 2022

- Created comprehensive BI reports leveraging **Power BI** to visually represent test plans based on functional and API requirements, ensuring 100% test coverage, and providing stakeholders and Product Owners with clear insights into project progress.
- Attained a **20% reduction in testing efforts** by generating test data with over 500 parameters using advanced **Excel** functions.
- Mentored** a team of 3 testers in developing and implementing a regression testing framework in **Python**, improving efficiency by 10%.

Accenture Solutions

Bengaluru, Karnataka

Test Automation Senior Analyst

July 2021 - December 2021

- Coordinated end-to-end testing within an **agile** scrum team, leveraging **Azure DevOps** for project management throughout the **SDLC**, and achieved 80% accuracy in validating material creation requests by writing **SQL queries** to ensure data governance and integrity.

Infosys Limited

Bengaluru, Karnataka

Technology Analyst

May 2016 - July 2021

- Managed testing team efforts and reports for 5+ modules in the Goods and Service Tax project, overseeing a team of 8 members.
- Designed and executed automated regression scripts using **Selenium**, reducing the probability of production regression defects by 40%.
- Developed advanced SQL scripts to perform integration testing ensuring data accuracy in the database, supporting data analysis.
- Spearheaded defect triage meetings, enhancing cross-functional team communication and **reducing defect resolution time by 60%** using interactive Power BI dashboards. Integrated metrics like defect backlog, defect aging to visualize and analyze defect trends.
- Implemented **Python** scripts to execute test plans for API and functional cases for validating the application hosted on **AWS EC2**.

PROJECTS

- Conducted sentiment analysis on over 50k IMDB reviews using **LSTM**, and **BERT** models, achieved 88% accuracy with BERT post hyperparameter tuning. Utilized **PyTorch** and **HuggingFace** for model implementation.
- Employed Python libraries **NLTK** and **spaCy** libraries for NLP tasks on Yelp reviews, applying **tokenization**, **stemming**, and **TF-IDF vectorization**. Achieved 85% accuracy with sentiment classification models using bag-of-words and word embeddings.

EDUCATION

Georgia State University - J. Mack Robinson College of Business

December 2023

Master of Science, Data Science and Analytics (GPA – 3.8/4.0)

Atlanta, GA

Courses: Machine Learning, Statistics, Data Visualization, Deep Learning, Predictive Analytics, Scalable Data Analytics, Graph Analytics

Andhra University

April 2016

Bachelor of Technology, Chemical Engineering (GPA – 8.67/10.0)

Andhra Pradesh, India