ISFAR BASET

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EDUCATION

Georgetown University (GU)

Master of Science in Data Science and Analytics | GPA: 4.0

Washington, D.C.

Aug 2023 - May 2025

Coursework: Probabilistic Modeling and Statistical Computing, Database Systems and SQL, Advanced Data Visualization, Data Ethics and Policy, Computational Linguistics, Machine Learning App Deployment, Digital Storytelling, Big Data and Cloud Computing (**TA**), Applied Generative AI (**Lead TA**)

Leadership & Activities: Social Committee Member & Lead Mentor in the Data Science and Analytics program

Grand Valley State University (GVSU)Bachelor of Science in Computer Science

Grand Rapids, MI

Aug 2015 - May 2020

WORK EXPERIENCE

Shift Digital, Software and Delivery Team Data Analyst

Birmingham, MI Nov 2021 - May 2023

Improved data accuracy by 25% across 10+ enterprise projects by optimizing big data ETL processes

- Worked with cross-functional teams to design scalable data architecture, delivering actionable findings to senior executives
- Streamlined operations for 12 high-value clients and saved 15 hours weekly by automating billing data processing
- Managed data migration and transformation within Databricks, creating efficient pipelines for business-critical insights
- Leveraged SQL and Python within PySpark to transform raw data into cleaned, analysis-ready datasets
- Enhanced data visibility with interactive dashboards, enabling faster decisions for key stakeholders
- Crafted technical proposals aligned with project scope and business goals, achieving near 100% customer approval rate

Array of Engineers

Grand Rapids, MI

Computer Engineer

Jul 2020 - Nov 2021

- Verified Airbus A350 avionics software using DOORS and Ansys SCADE, ensuring aerospace industry compliance
- Improved user experience by optimizing web app features with AngularJS, increasing client retention by 25%
- Introduced modular workflows for software testing, enhancing adaptability and achieving 98% on-time delivery
- Conducted A/B testing on web app features, identifying improvements to enhance functionality and usability
- Led GitHub code reviews across a multidisciplinary team, mitigating critical issues early in the development process

ACADEMIC PROJECTS

Topics and Sentiments in Reddit Data

Georgetown University | Aug 2023 - Dec 2024

- Analyzed 1+ billion Reddit posts and comments over 14 months using NLP and ML, uncovering U.S. state-level trends
- Refined 109 GB of data using Spark on AWS SageMaker, achieving a 95% reduction for efficient large-scale analysis URL: <u>U.S. State Sentiments on Reddit</u>

Entity Relationship Extraction Web App

Georgetown University | Aug 2023 - Dec 2024

- Built a Flask app using spaCy and D3.js for real-time entity relationship analysis and visualization.
- Deployed on Heroku with a responsive Bootstrap UI, enabling query-driven and versatile visualization of news data

Crisis Information Retrieval and Summarization

Georgetown University | Aug 2023 - Dec 2024

- Engineered a hybrid retrieval system with SentenceTransformers, strengthening search precision for crisis datasets
- Developed and launched a scalable app using Docker for information retrieval and transformer-based summarization

Geospatial Climate Impact Analysis

Georgetown University | June 2023

- Evaluated 40+ years of climate data and delivered insights through an interactive web interface
- Generated visualizations using Python (Pandas, Seaborn, Plotly) and R (ggplot2, Quarto) to simplify complex datasets URL: Climate Chronicles Southeastern Utah's National Parks

SKILLS

Programming: Python, SQL, R, Java, C++
Data Visualization: Tableau, Plotly, Seaborn
NLP: spaCy, Hugging Face Transformers, BERT
Tools: Docker, Flask, Git, Quarto, CI/CD pipelines

Machine Learning: Scikit-learn, TensorFlow, PyTorch, XGBoost Big Data & Cloud: Apache Spark, Databricks, AWS Sagemaker

Databases: MySQL, PostgreSQL, MongoDB, Snowflake

Statistical Methods: A/B Testing, Regression, Bayesian Analysis