

Leah M. DeYoung

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SUMMARY

Most recently a Software Engineer with 3+ years of project and program management background. Skilled in data analysis, data science, project management, quality control, communication, and cross-functional team cooperation.

SKILLS

Python (pandas, NumPy), Visualization (Matplotlib, plotly-express), Machine Learning (scikit-learn), Project Management (JIRA), SQL (Oracle SQL Developer, PostgreSQL, Microsoft SQL Server), Large Language Models (LLM), AWS, Agile, Kanban, and Waterfall methodologies.

TECH PROJECTS - DATA SCIENCE AND MACHINE LEARNING

1. Python Question and Answer Generative Chatbot: [Code links](#) [Demo Video](#)

Completed exploratory data analysis and cleanup, then fine-tuned a large language model with retrieval augmented generation respond to questions posed about the python programming language.

- Utilized Llama2, HuggingFace, and Langchain within Python.
- Trained multiple models using cross-validation with predictions, then created a dummy model for comparison.
- Determined that the second-most accurate is very close to the first, and at least ten times as efficient.

2. Customer Retention and Churn Data Analysis and Machine Learning Models: [Code links](#)

Provided exploratory data analysis and developed multiple machine learning models to predict customer churn.

Recommended best model to help make predictions and promote customer retention

- Utilized pandas, SciPy, NumPy, Matplotlib, and scikit-learn within Python.
- Developed non-gradient and gradient boosting machine learning models and used cross validation to predict churn.
- Created final report and recommendations for the client on which they can base future decisions.

3. Ride-Sharing Data Analysis: [Code links](#)

Created analysis of taxi businesses' public data to provide recommendations for best locations within the Chicago area for profitable expansion of a ride-sharing business and identified main competition in the taxi business.

- Utilized PostgreSQL as well as pandas, NumPy, streamlit, and plotly within Python.
- Drilled down via SQL to identify specific routes and days to narrow down data for Python analysis.
- Proposed based on hypotheses testing that rain has a positive impact on utilization of rideshare services.

EMPLOYMENT

Dataspeak

New York City (Remote)/October 2023 - November 2023

Data Scientist(October 2023 - November 2023)

- Implemented a Large Language Model and fine-tuned with Retrieval Augmented Generation to create a Generative AI customer service chatbot, allowing the client to reduce customer wait times and cut costs by 20%.

SPS Commerce

Minneapolis, MN/June 2014 – December 2019

Program Manager/Software Engineer II (November 2018 – December 2019)

- Created and managed project plans for scalable and reliable solutions on a data analytics platform, demonstrating value to suppliers by providing accurate retail sales data and meeting 100% of target implementations within 3 months.
- Created systems to monitor and quality check data completeness and accuracy by using Python, C#, and SQL resulting in a 70% increase in engineer productivity over one year of implementation.

Quality Engineer II (June 2017 – November 2018)

- Engaged in cross-functional collaboration with engineering, management, and product teams by performing quality testing using Java and SQL in a timely manner, as evidenced by meeting deadlines consistently.

Support Specialist I (June 2016 – June 2017)

- Utilized SQL by performing in-depth exploration of causes and trends in data transmission and content errors to educate Customer Support team on opportunities for client education, improving client error rates by 25%.

EDUCATION

TripleTen (fka Practicum)

Remote Learning/January 2023 - October 2023

Data Science Program

University of Wisconsin – Eau Claire

Eau Claire, WI/May 2014

Bachelor of Arts – Spanish and Organizational Communication, *magna cum laude*, University Honors, **GPA 3.56**