

ABBY ESTEP

Mathematics & Statistics Major

@ abbyruthe@gmail.com

abbyruthe.github.io

in linkedin.com/in/abby-estep/

github.com/abbyruthe

EDUCATION

Gustavus Adolphus College

Bachelors of Arts

Majors: Mathematics & Statistics

Minor: Computer Science

Sept 2018 – Expected May 2022

EXPERIENCE

Data Science - Intern

Securian Financial

May 2020 – August 2020 Remote

- Examined depreciation data for automobiles to support a broader project in modeling the exposures created by Guaranteed Asset Protection (GAP) policies while using certain Python libraries to ensure that the data was clean and ready to be utilized in a later ML algorithm.
- Designed a small database to ingest monthly extracts of depreciation curves from the provided data in order to organize the vast array of information to be examined. Leveraging this database, I then conducted an analysis of variation or drift in depreciation forecasts observed over time.
- Completed business related research on the project that I was studying as well as presented my findings and suggestions to a group of senior data scientists at the conclusion of the internship.

Data Science - Microintern

Gustavus Adolphus College Career Center

Aug 2020 – Oct 2020 Remote

- Cleaned data from surveys and merged to compare values using Python and PANDAS.
- Created a presentation displaying pre- and post-test results using easy-to-read graphs and tables to help those making the decision for the funds of the course more confident.
- Made suggestions on what to include and omit for the next time that course was offered as well as updated list of survey questions for easier analysis.

PROGRAMMING LANGUAGES

Python

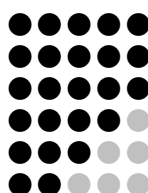
R

Java

GIT (in terminal)

SQL

HTML



TECHNICAL SKILLS

Linear Algebra

Data Analysis

Data Science

ML

DL

Variance Analysis

Group Communication

RStudio

NumPy

PANDAS

Scikit-learn

Tensorflow

PROJECTS

Trading Algorithm

- Designing an developing a machine learning model that will determine price changes in the market using historical data as well as sentiment analysis of recent news articles.
- Train the model to also trade in Python using TensorFlow as well as in Java.

Data Analysis

- For Gustavus Adolphus College Chaplain's Office, compared pre- and post-test survey results to determine the students satisfaction of a camp that occurred in Summer 2019.
- Presented to donors the findings of the data and helped the company make an informed decision on their allotment of donations prior to the next summer.

EXTRA-CURRICULAR ACTIVITIES

- Handbell Choir at Gustavus Adolphus College
- Member of Women's Action Coalition (WAC)
- Member of Students for Reproductive Freedom (SRF)
- Member of Gustavus Running Club

LEADERSHIP & SERVICE

- Army Leadership course through Gustavus Adolphus College
- Reconstructing run-down bikes to be donated through Key City Bike in Mankato, MN

STUDENT EMPLOYMENT

- Student employee at Gustavus Chaplain's Office - Freshman, Sophomore, & Junior +
- Grader and Tutor in Gustavus Math department - Junior +