Al Boot Camp Project 3

Project 3 Final

Team Members:

- Thomas Brown
- **Chris Covill**
- Ava Lee
- Jed Murphy

Project Overview

Project Purpose / Description

Analyze a problem using machine learning (ML):

o Analyze Exchange Rates and the relationship to Gross Domestic Product Growth (GDP Growth).

Project Goals

Goal/Questions to be addressed

• Goals:

- o Analyze all 90,885 Colorado crashes that were collected from February 2016 to March 2023.
- o Our analysis all Colorado traffic crash data, our accuracy predictions were based on Weather, County and Street.
- o To identify the different classifications of crashes and potential impact within each classification.

Data Sources

The Data

- Clean and Consistent
- Inconsistent and Duplicative

Standardization Approach

Approach

Approach taken to achieve goals

The analysis was broken into steps with a Jupyter notebook for each step:

Step1 Build base data

Step2 Analyze weather and county data

Step3 analyze street and county data

Performance was measured.

Best Model: Scikit-learn, Keras, TensorFlow

Performance Improvement after:

- Before Adjustment Duration:
- After Adjustment Duration:

Project Milestones:

- •Project ideation Complete 7/22
- •Data fetching Complete 7/22
- •Data exploration Complete 7/26
- •Data transformation Complete 7/26
- •Data analysis Complete 7/27
- •Testing Complete 7/27
- Creating documentation Complete 7/29
- •Creating the presentation Complete 7/30

Result/Conclusion

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Summary

Future Considerations

Additional research and data remediation for the issue below:

