Andy Wong

Major: Masters in Information Management
School: University of Washington
Target Graduation: June 2024
Division: Cox Automotive
**Hiring Manager:** Chris Stutsman

Forecasting Vehicle Retail Depreciation
*How do can we help dealerships feel more confident in their pricing choices?*

Data Selection and Preparation

- Queried large used vehicle datasets on **Snowflake** to acquire data to be used as model features.
- Aggregated data on a per day basis with a Year-Make-Model level
- Cleaned and re-formatted large datasets in preparation for joining, analysis, and further exploration on **Dataiku** using a **Python** notebook.
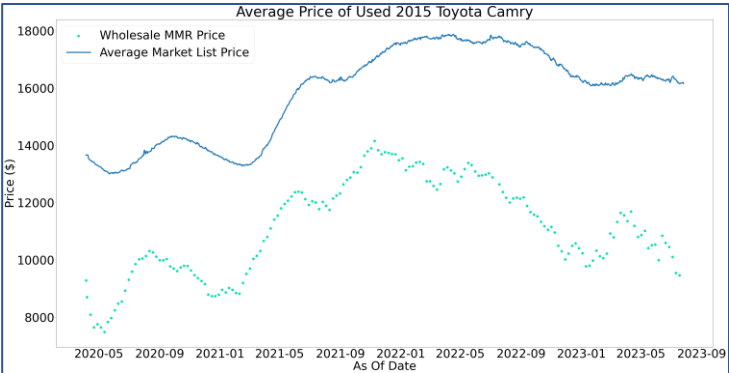
Model Building and Fine-tuning

- Extensive visualization and analysis of features on a multi-variate level to assess viability as a modeling feature with **matplotlib** and **pandas**.
- Performed ARMA Parameter Analysis via Autocorrelation Function (ACF) and Partial Autocorrelation Function (PACF).
- Building and training a model with **sci-kit learn** and **statsmodels ARIMA**
- Creating novel features from pre-existing ones in attempt to better fit learning model to actual market list price data.
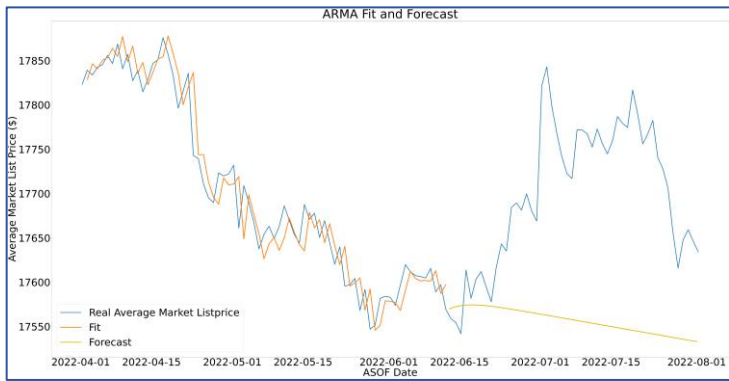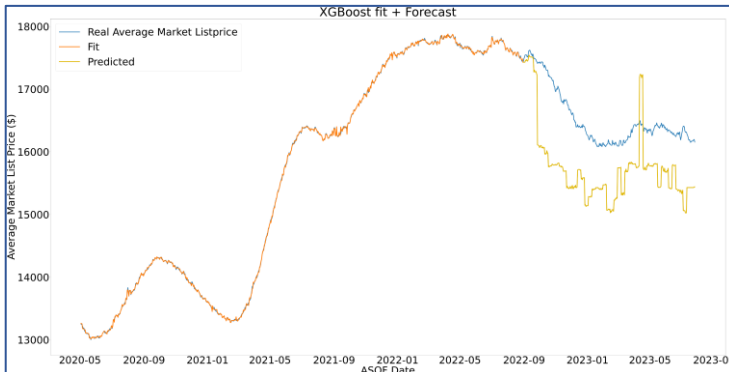
Buzz Lightyear

- Formulated project story with clear success criteria via **Rally.**
- Introspectively examined my weekly work habits and re-focused on what went well via **Mural**.
- Redefined my mindset and approach to working and self-value via **Buzz Lightyear.**
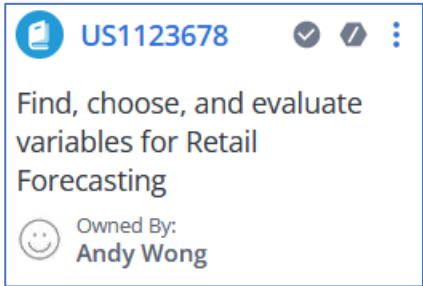
Why I Add Value to Cox

- Adaptable to new skills, technologies, and practices to create a workstyle that best fits me.
- Ambition and drive to learn and embrace the unknown.

What I Learned from Cox

- The value of a of an inclusive, driven, and family-style work culture.
- How large datasets are stored and recalled on cloud-based systems.
- How to prepare a timeseries dataset for modeling and analysis.

My Skills

Dataiku, Python, Snowflake, Rally, Mural