Price Prediction

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Problem Overview

Price Prediction for Products on Amazon

The goal: Predict future prices for some items on Amazon

Use past price trends

Look for specific times when price changes abnormally

    Low lows, high highs

Methods

Tools

Camelcamelcamel.com

    Amazon price tracker
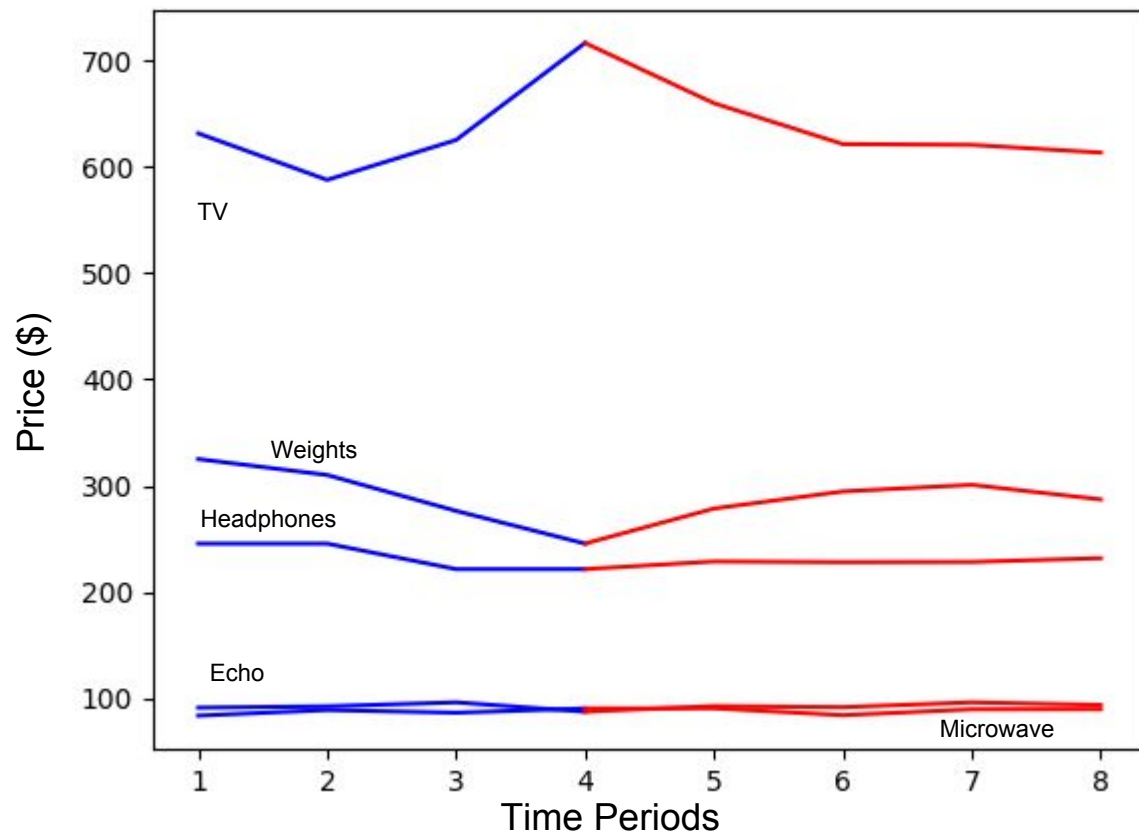
Python

    Script to pull item data

    Script to make predictions and graphs

Process

1. Look up [5] items with adequate price history

2. Pull information from those items

3. Get average values for each time chunk

4. Run a simple linear predictor on those values

5. Add the predicted value to the list

6. Repeat steps 4 and 5 to get prediction

Results

Amazon Item Prices vs. Predicted Prices

Analysis and Discussion

Analysis and Discussion

Price predictions did not follow as expected

Several factors may influence the price history

  Reviews

  Novelty

  Other items

Certain times of the year may be weighted

Conclusion and Future Work

Conclusion and Future Work

Amazon prices can easily predicted

Other factors affect, not just time

Future improvements

    More models

    Larger item selection

    Add custom time weights

References

Amazon Item Scraper

https://gist.github.com/scrapehero/0b8b4aeea00ff3abf3bc72a9e9d26849

Simple Predictor

https://www.quora.com/How-do-I-predict-the-fifth-value-based-on-the-first-four-values-in-Python

www.camelcamelcamel.com

Thank You!