

## Project 5 Proposal.

Sneaker resell market was estimated to be a \$2 billion market in 2019. It is projected to grow into a \$6 billion market by 2025. In the early days of resell market, the resell price can vary depending on the geographic location and the platforms they use (eBay, craigslist, consignment stores). In 2016, StockX, the online resell marketplace began to track and report the resell price of each sneaker model that's sold on its website and other platforms such as eBay. It now serves as the centralized place to check how much a particular sneaker is worth at the moment.

Like many sneakerheads, I want to maximize the return on my collection and pay the lowest price on some coveted sneakers. Using the sale history from StockX, I like to do one week forecast, one month forecast and one year forecast on the resell price of a particular sneaker and use the information to determine when to buy or sell your sneaker collection.

The following data will be scraped from StockX website for analysis.

Variables	Type	Description
Sneaker Model	string	Sneaker's brand and model
Colorway	String	The color combination of sneaker
Size	float	Sneaker Size
Date	Date time	the date sneaker is sold
Highest Price	Int	The highest price someone paid for the sneaker
Lowest Price	int	The lowest price someone paid for the sneaker
# of sales	int	Total number of sales for each sneaker model
Price	int	Resell price of sneaker
Price premium	Int	the amount over the original retail price
Retail price	Int	The original retail price
Release Date	Date time	The date the sneaker is released

### Possible Tools/Models

Web scraping (BeautifulSoup, Selenium)

Time series analysis (ARIMA, Prophet)