

## **Machine learning approach to forecasting product display patterns**

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A Toronto-based food manufacturer is interested in predicting the presence of displays and disruptors in its major retail outlets. The presence of displayed products can lead to incremental sales while the absence of these products leads to loss of sales. This research would involve analyzing historical POS sales and shipment patterns to identify if a store had a display. With insights from the data, the manufacturer would like to predict when a store will take down display based on rate of sales and inventory levels. This would be applied in estimating the associated lost sales or predicting incremental sales. This project is to develop machine learning algorithms predict display patterns given historical data. The student needs to have good background in statistics, machine learning, and python programming.

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