

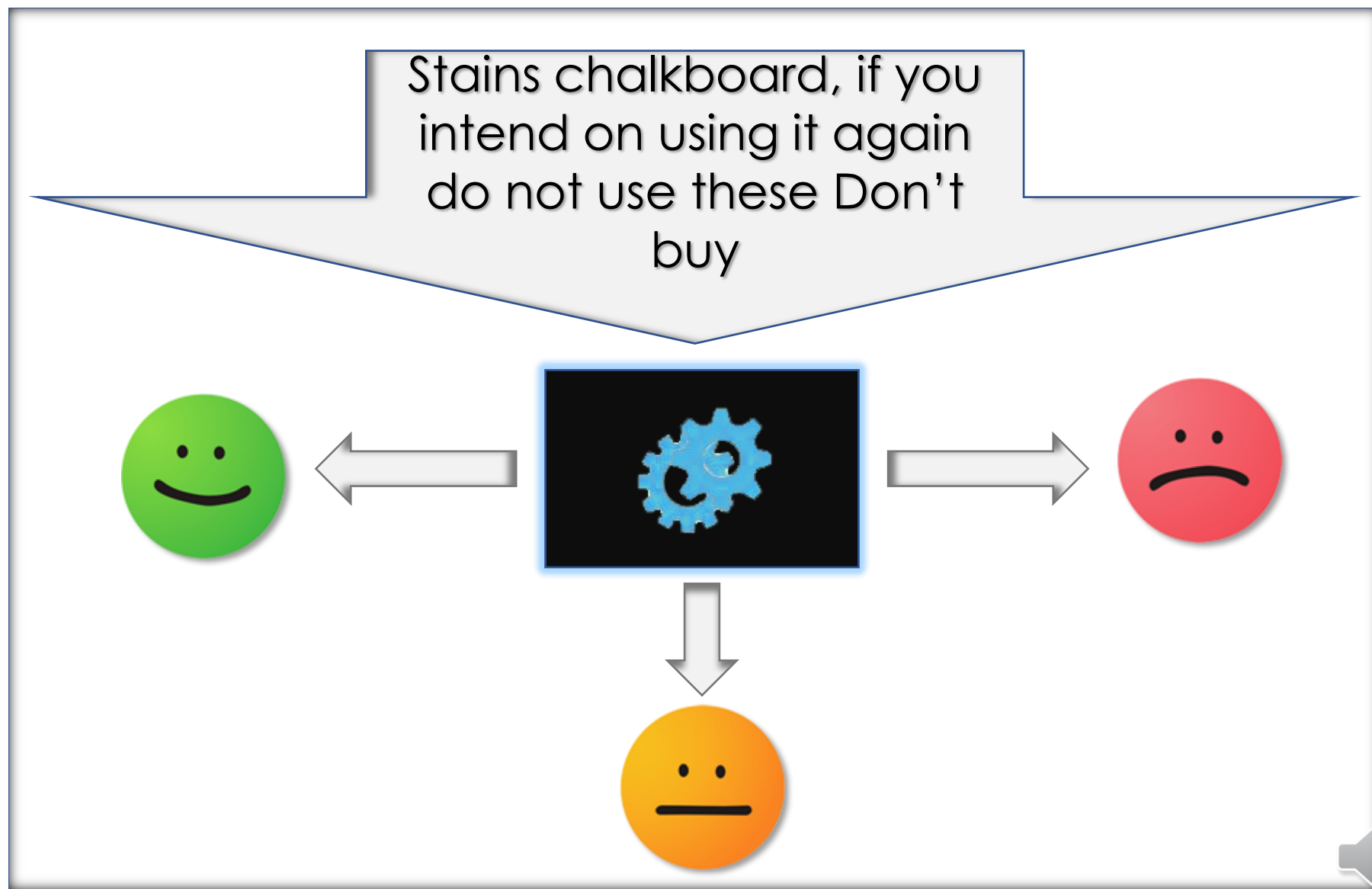


Sentiment Analysis with Machine Learning

By Collin Loo



What Is Sentiment Analysis



Use Case Examples



Customer
Service



Market
Research



Social
Media
Monitoring



Product
Analytics



Objectives

Business Case

- ❖ Classify reviews to identify product weaknesses

Approach

Develop two machine learning models:

- ❖ Support-Vector Machine
- ❖ Neural Network



Obtain Data

Data Source

❖ <https://nijianmo.github.io/amazon/index.html>

Model Data Summary

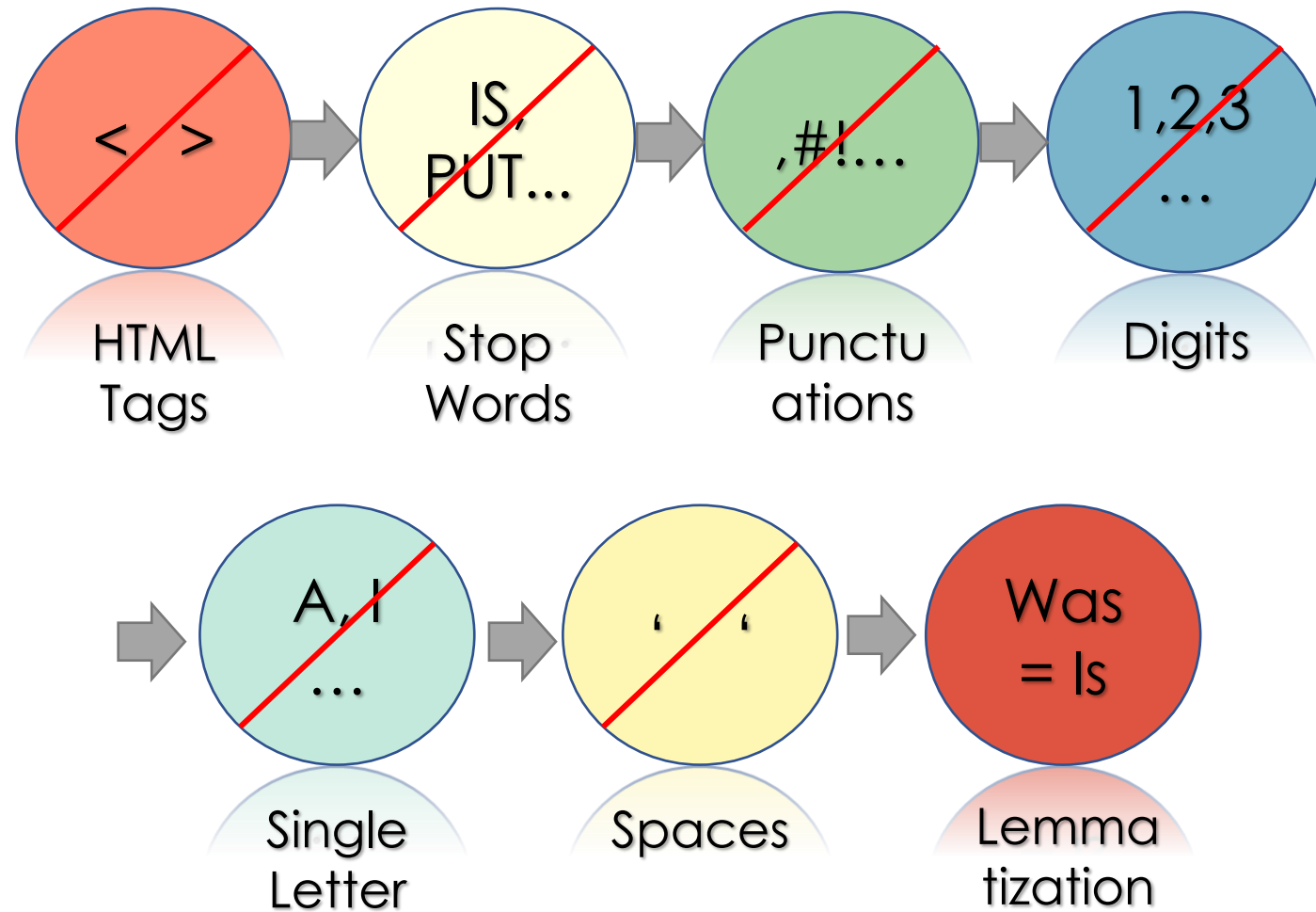


[illegible]

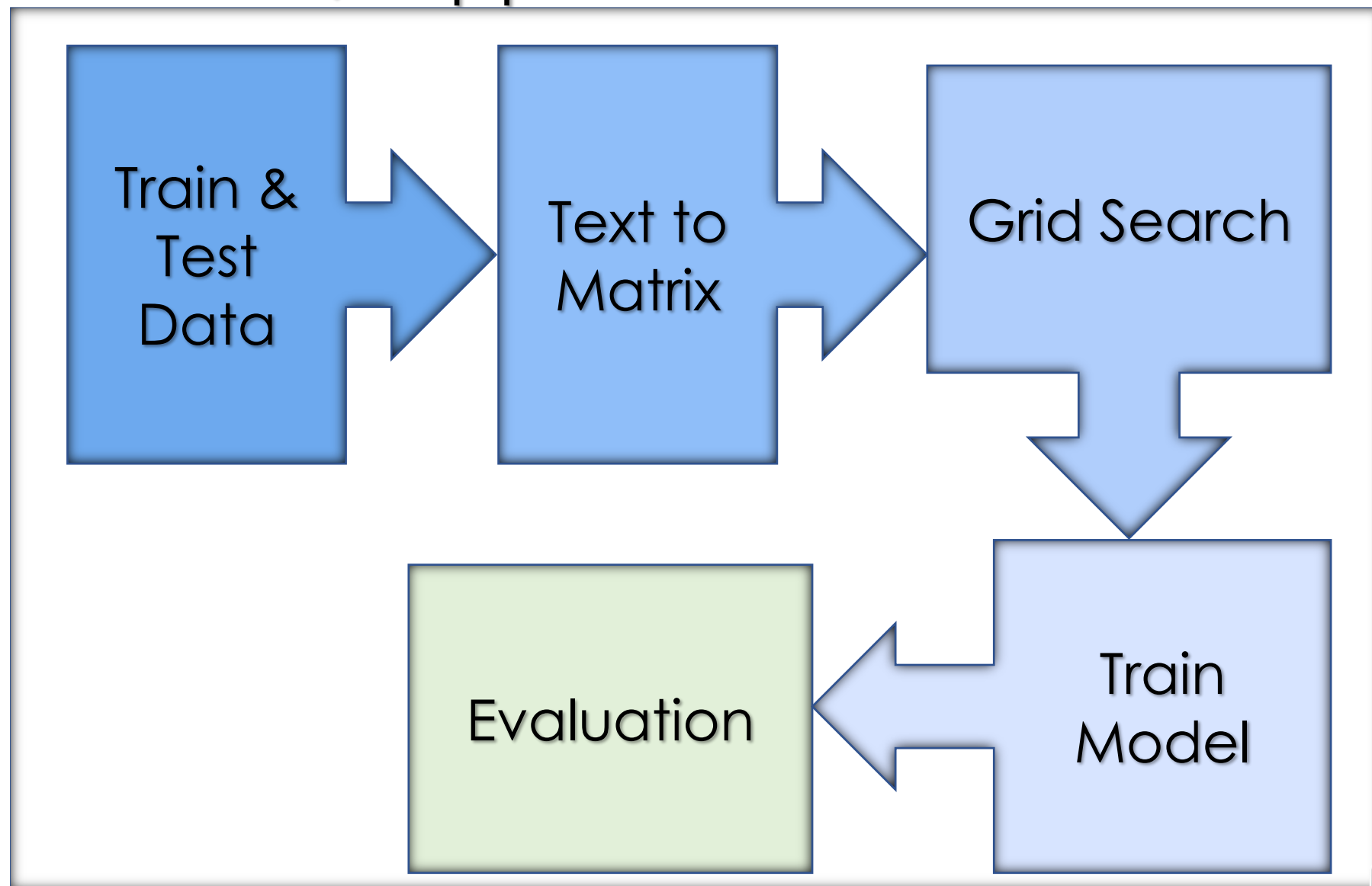
- ❖ Quick insight into unstructured texts



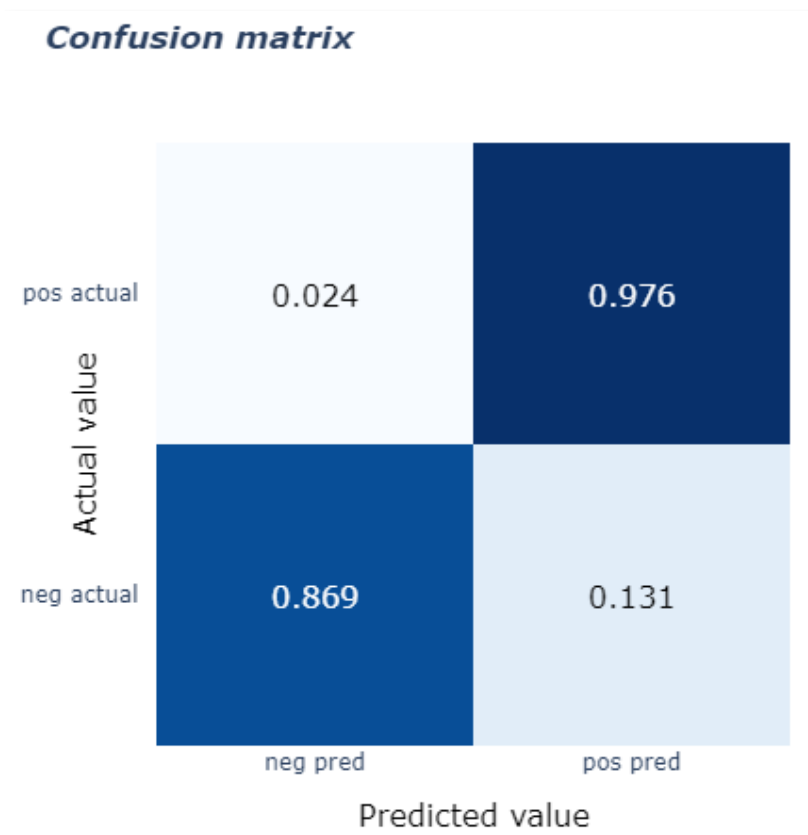
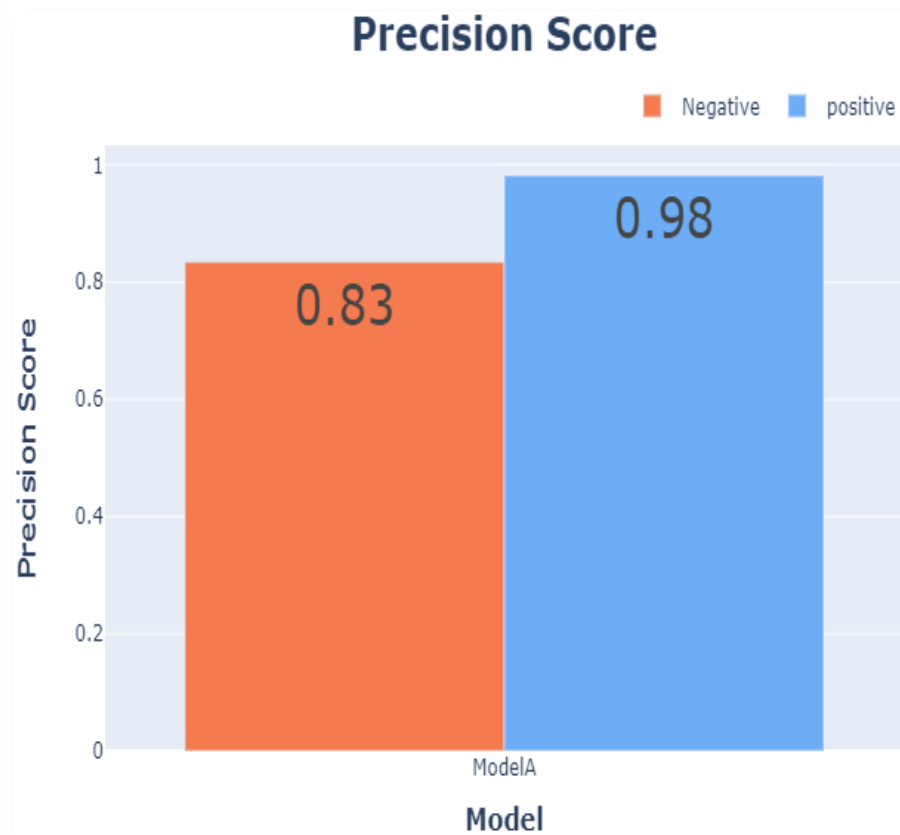
Text Processing



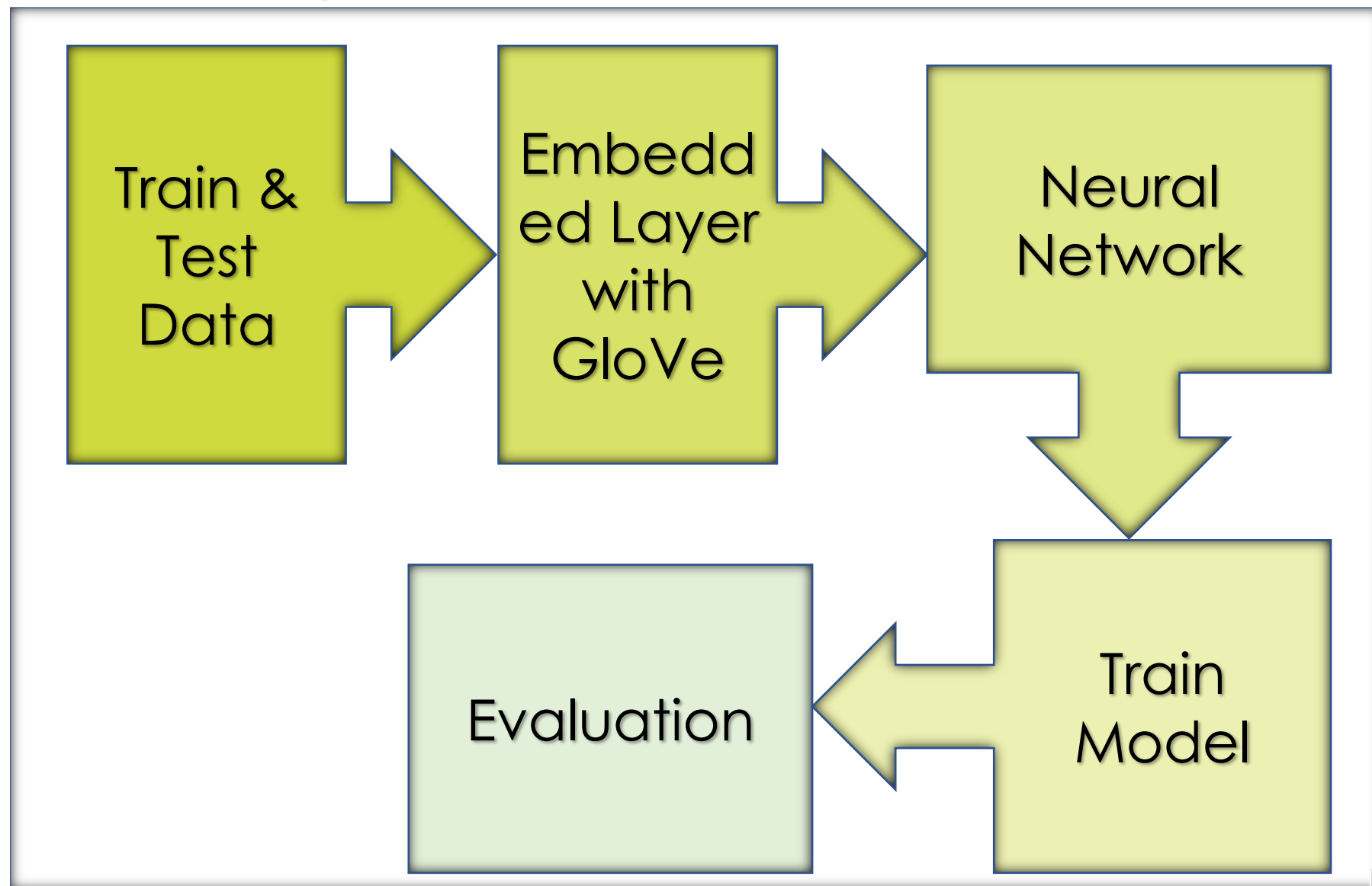
Model A, Support-Vector Machine



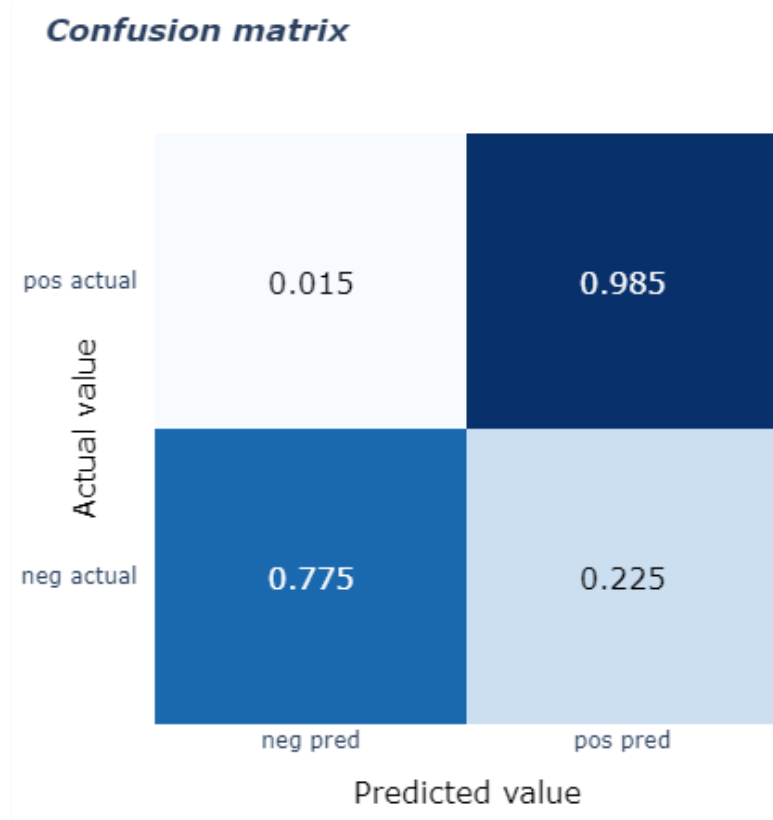
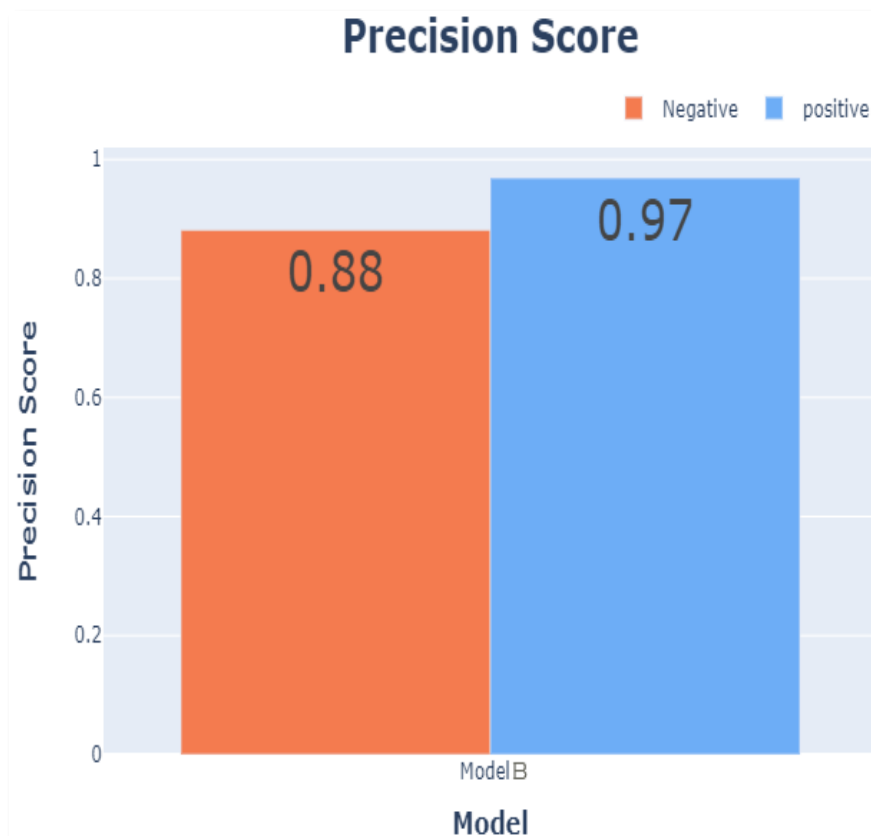
Model A, Performance Results



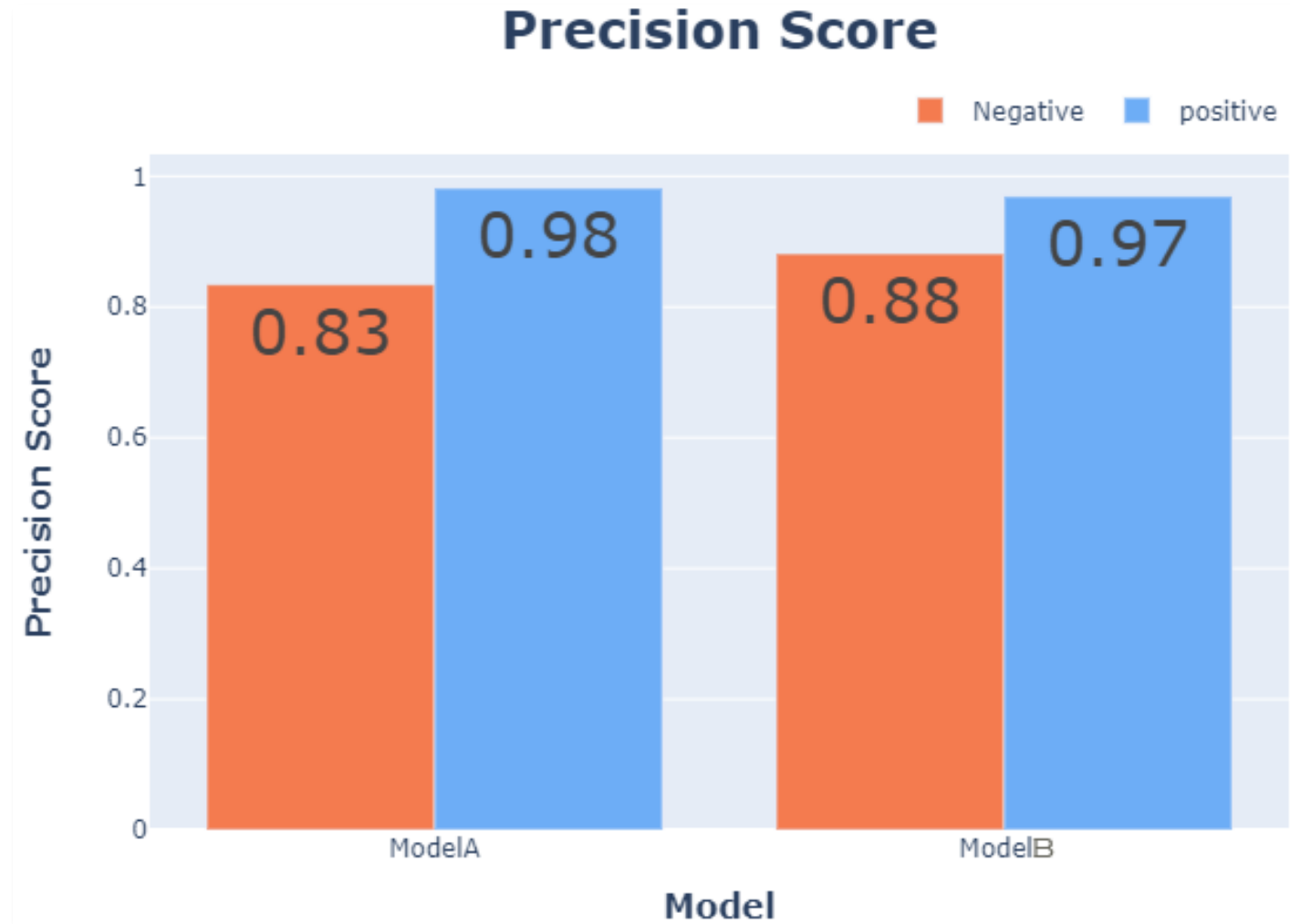
Model B, Neural Network



Model B, Performance Results



Model Comparison



Dash Application

Data, Word Cloud

Data Prediction

Texts Prediction



Conclusion

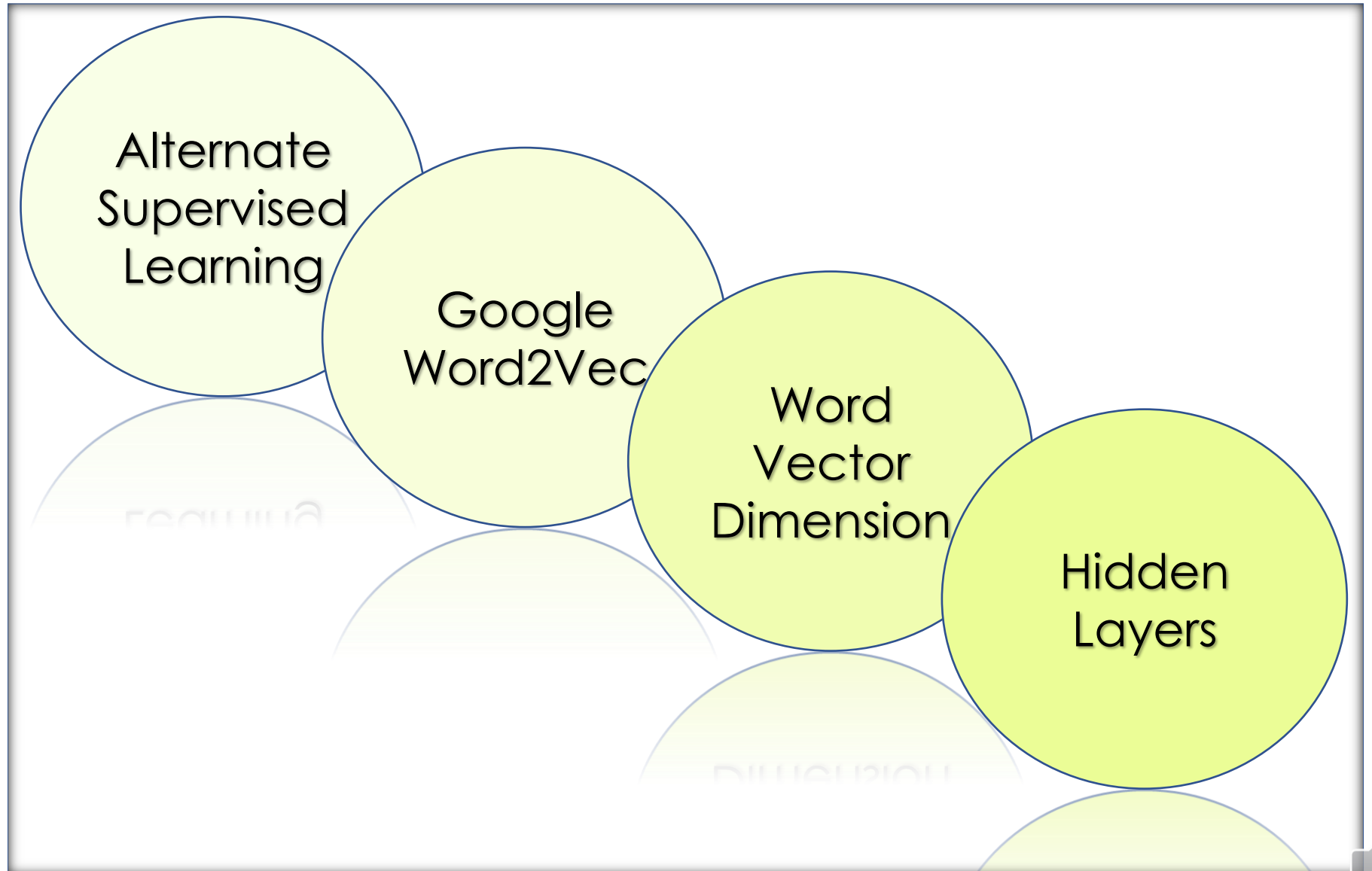
Short time
to train

Simple
Neural
Network

81% to 90%
Precision on
new data



Future Work



Thank You

Change things

At Flatiron School you learn how the future is being built, so you can change anything, starting with a new career in code, data science, or cybersecurity

Collin Loo 

collinloo@yahoo.com 

www.linkedin.com/in/collin-loo 

