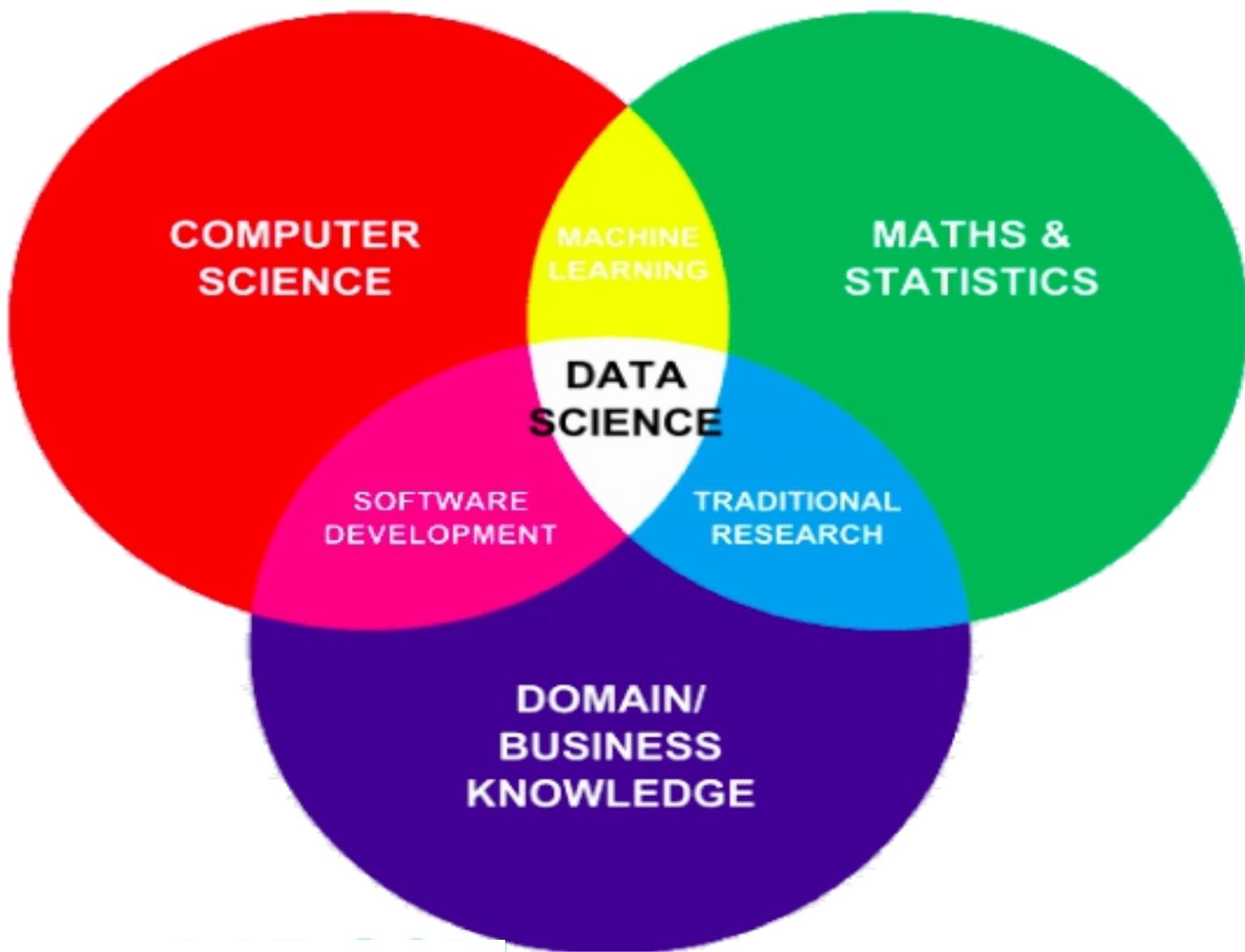


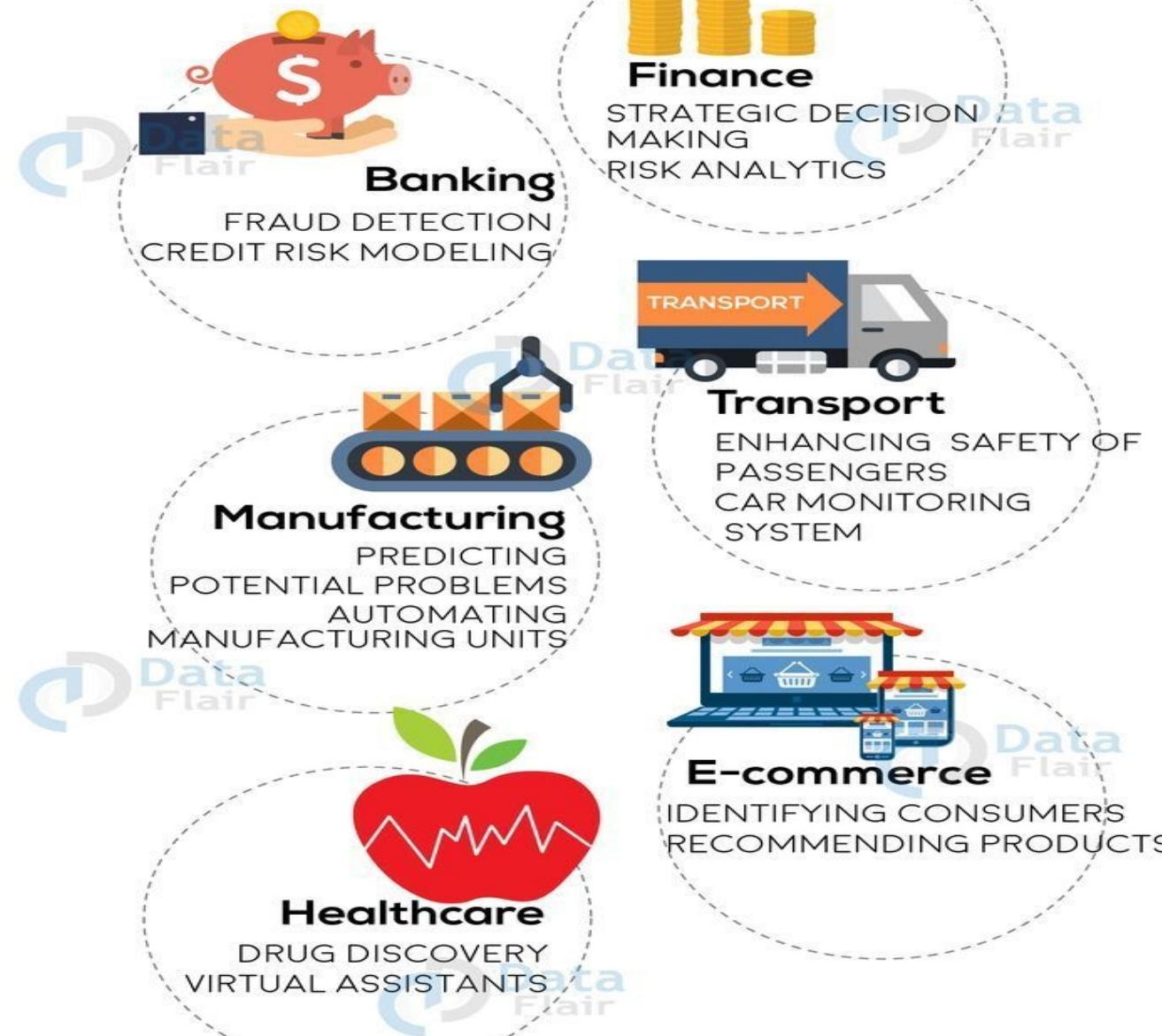
Python for Data Science

What is Data Science?



Why Data Science ?

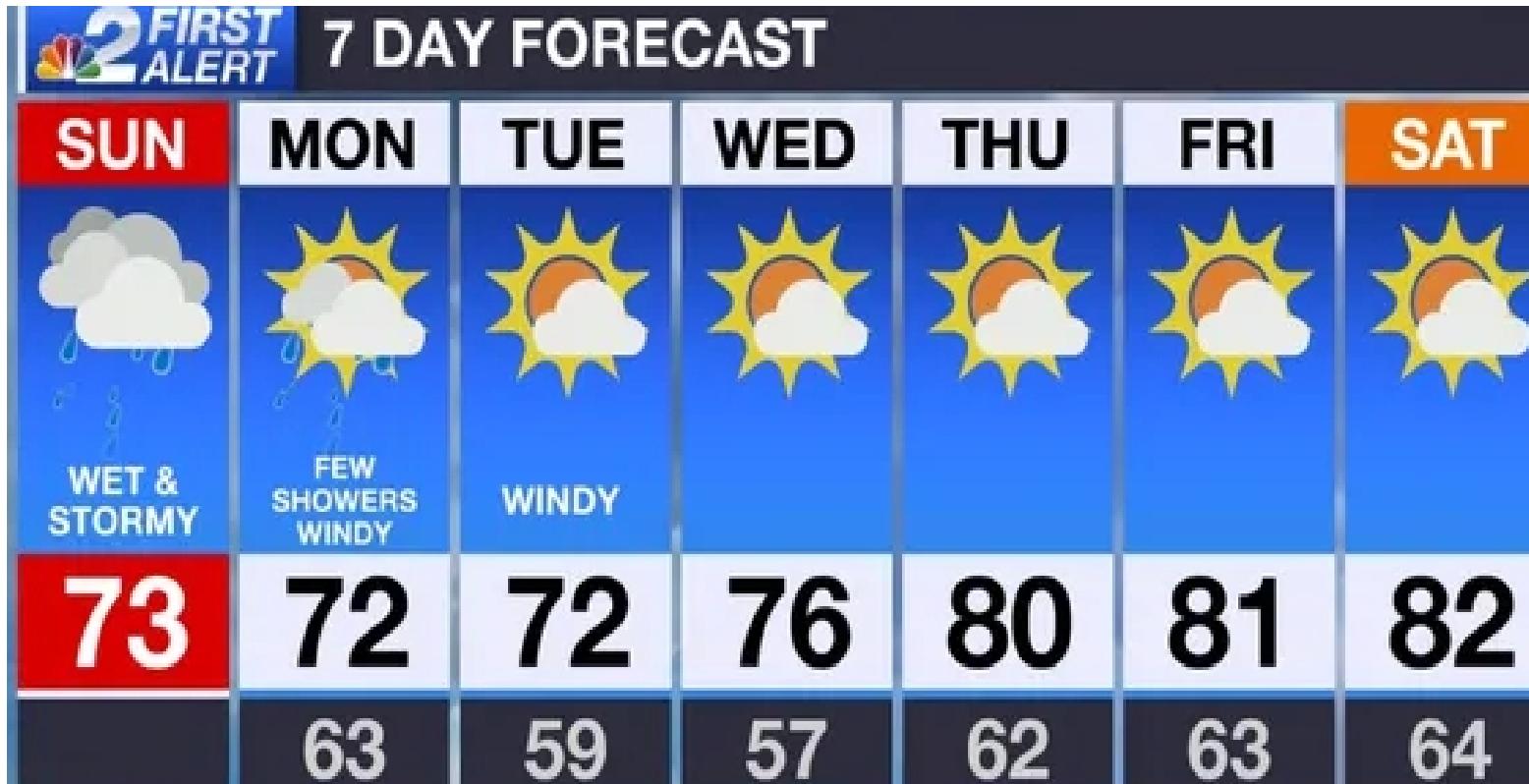
Data Science Applications



Prediction for future: Stock Market



Future prediction: Weather Forecast



Cluster Analysis



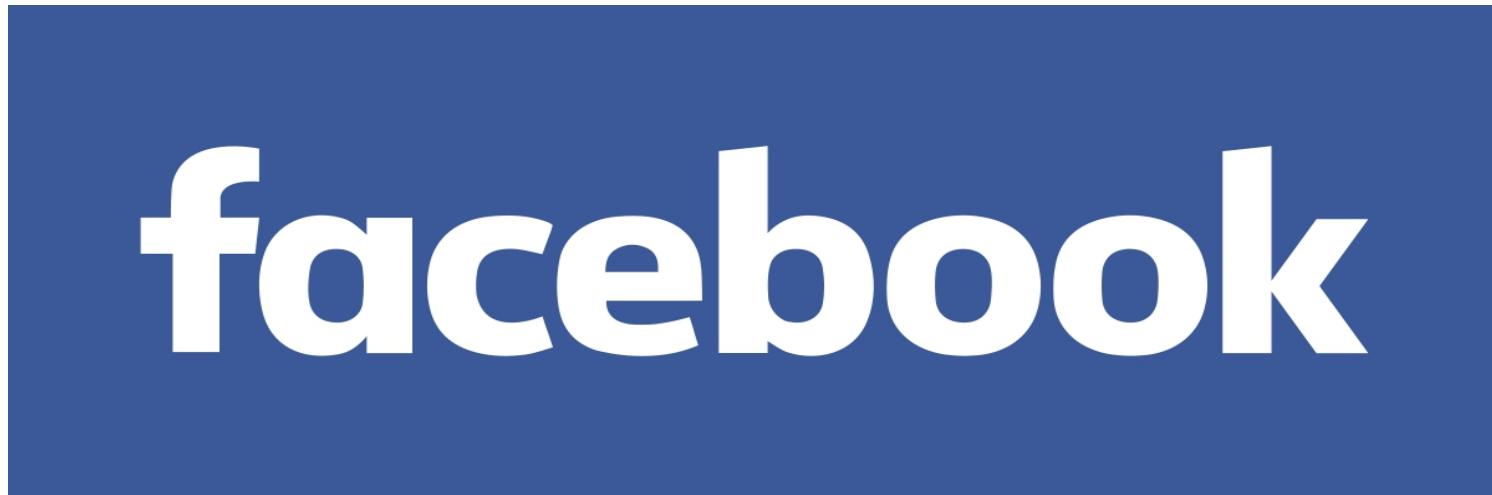
Google Search

I'm Feeling Lucky

Google offered in: español català galego euskara

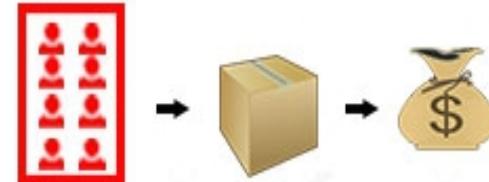
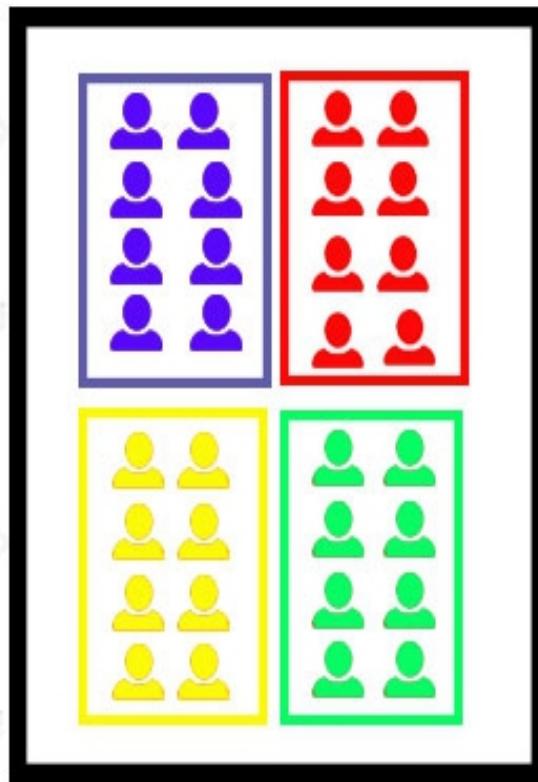
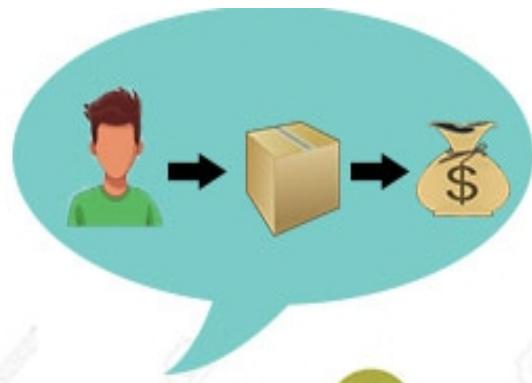
- **enhance a search result**
- **advs. recommendation**
- **website recommendation**
- **suggest interested news**

Cluster Analysis



- recommend new friends
- recommend new groups
- recommend interested ads.

E-commerce Cluster Analysis

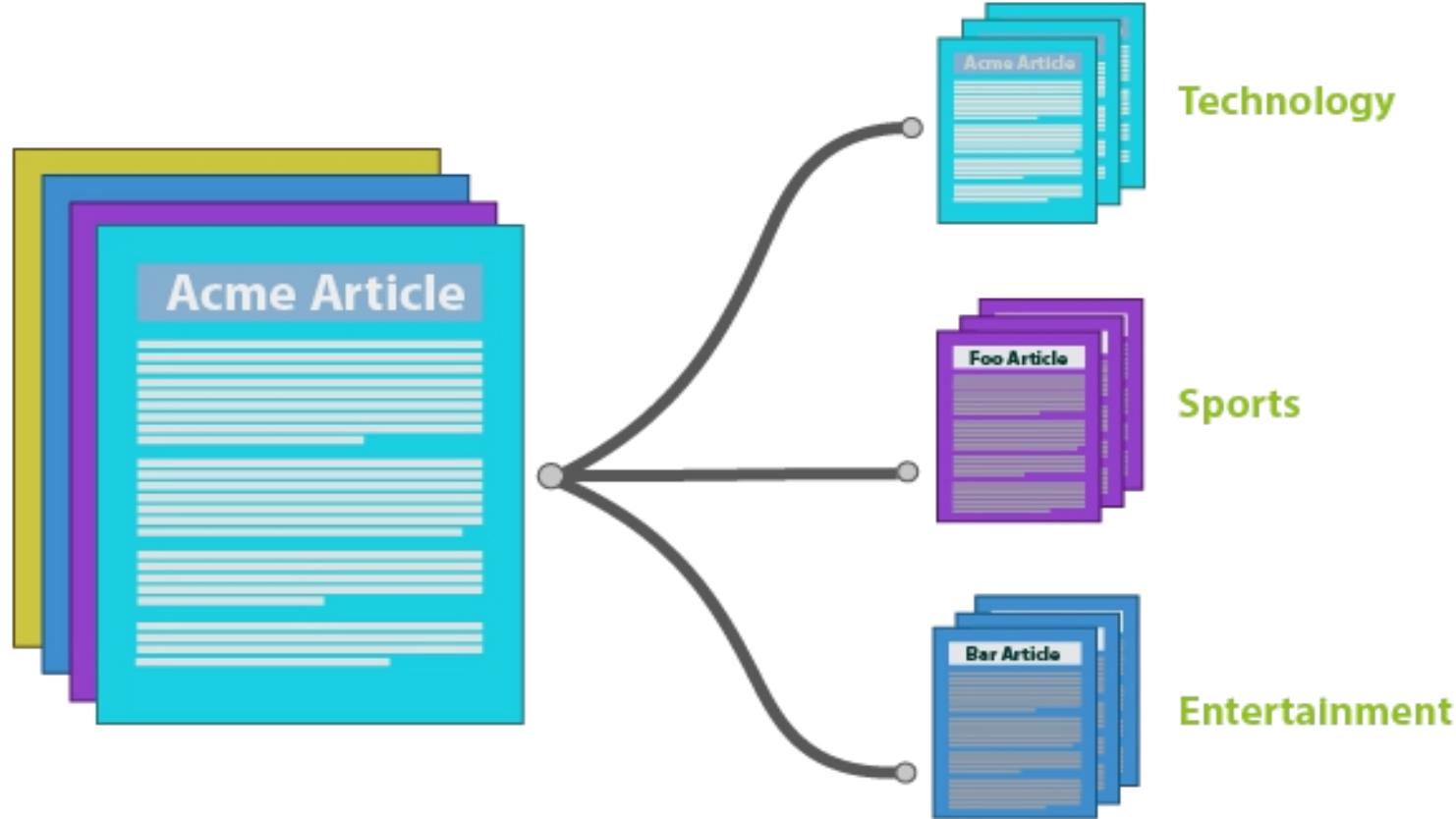


Trying to determine the appropriate audience for the product

Using clustering algorithms on the customer base

Selling the product to the targeted audience

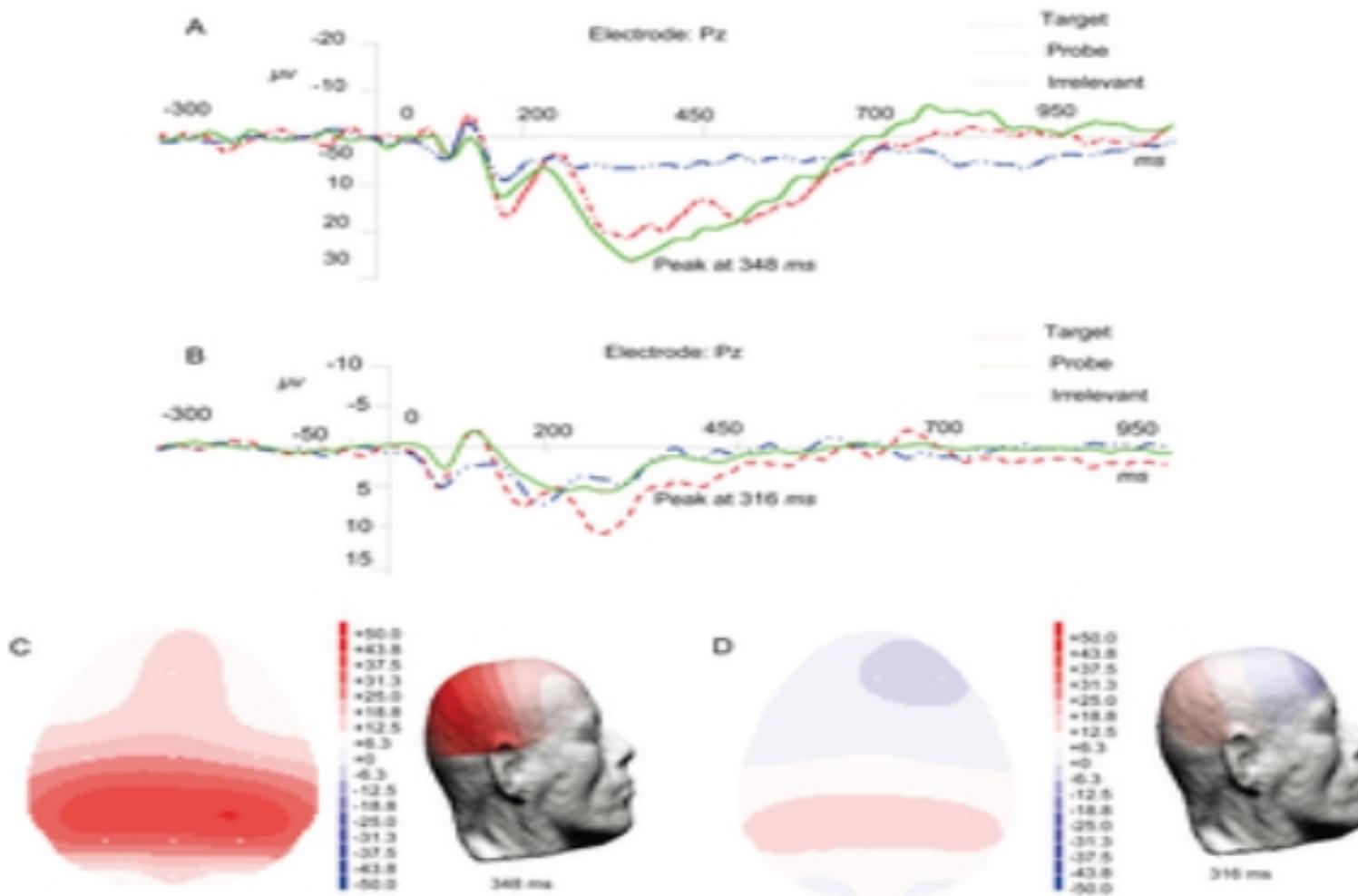
Document Clustering



Fraud Detection



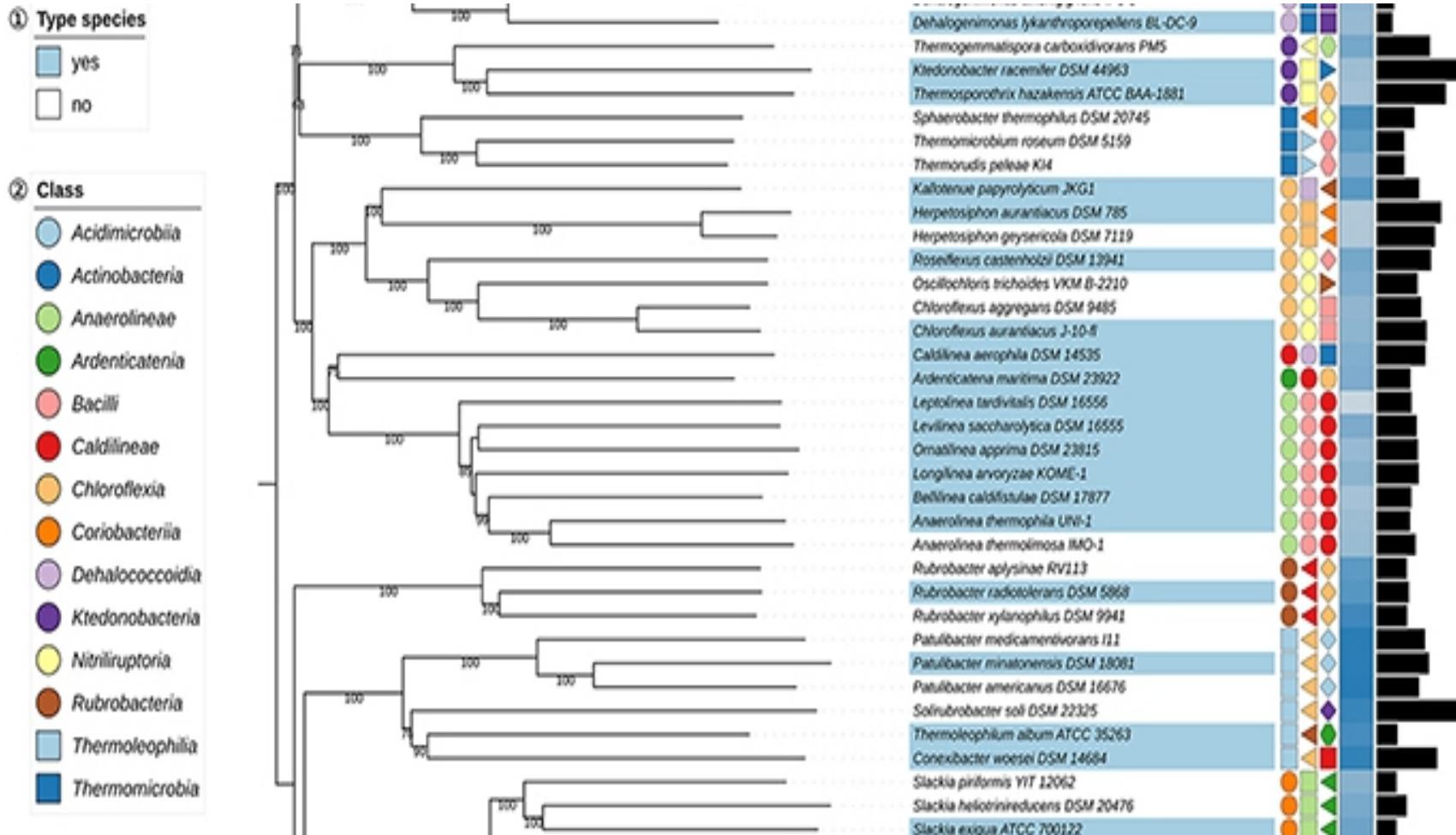
Lie Detection



Medical Applications



Bioinformatics: Classify function of new gene/protein



Bioinformatics: Detect disease via gene mutation



Neural style transfer

For example, let's take an image of this dog and Wassily Kandinsky's Composition 3:



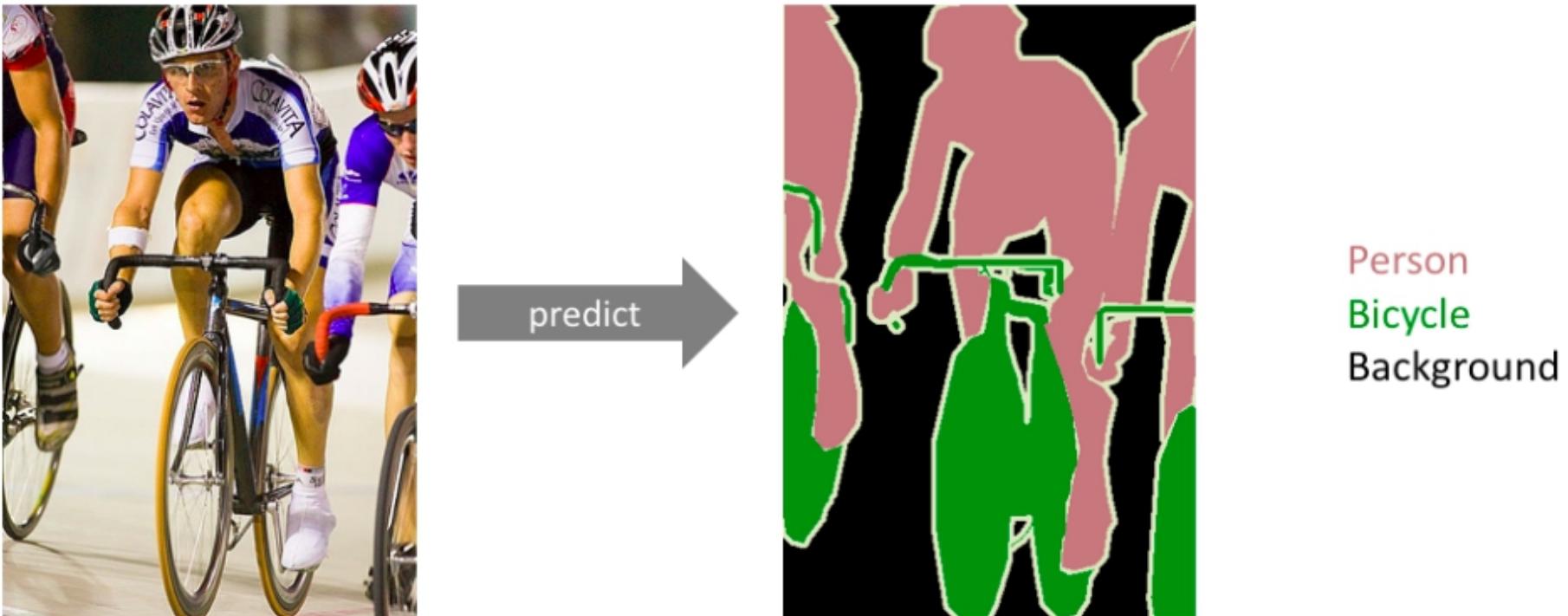
[Yellow Labrador Looking](#), from Wikimedia Commons by [EF](#). License CC BY-SA 3.0



Now how would it look like if Kandinsky decided to paint the picture of this Dog exclusively with this style? Something like this?

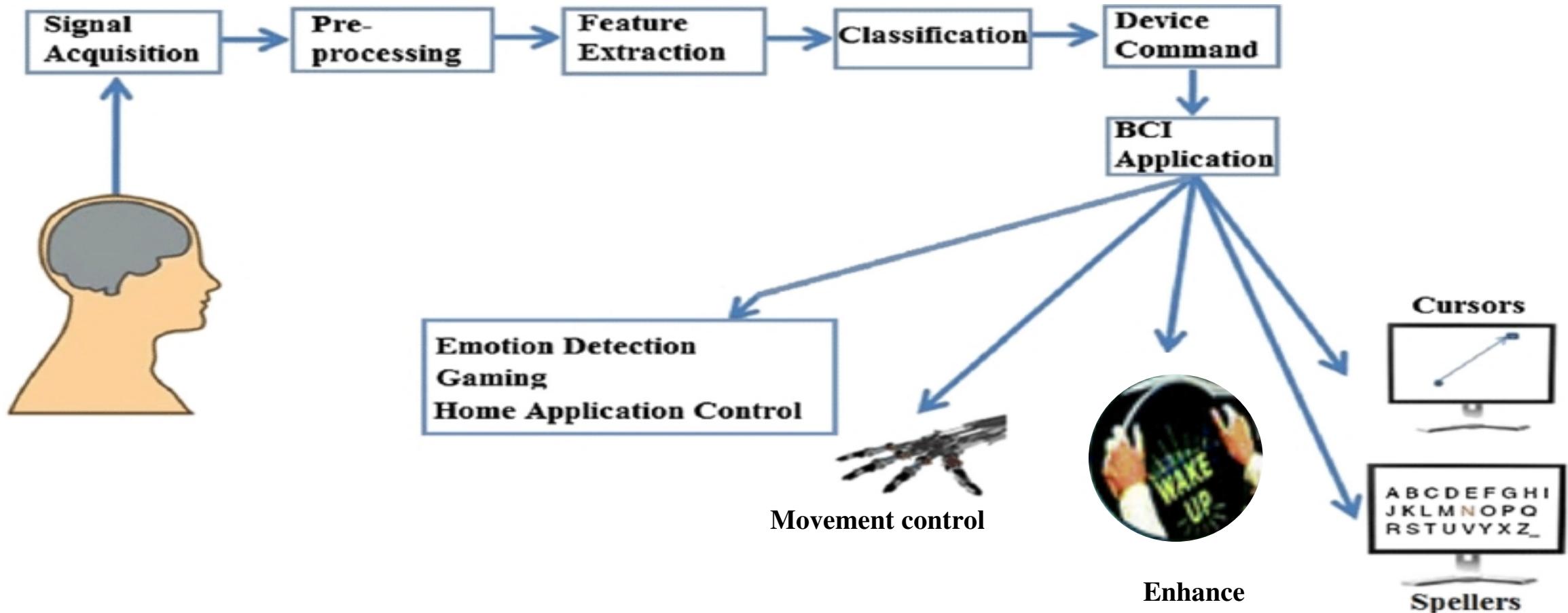


Semantic Image Segmentation



An example of semantic segmentation, where the goal is to predict class labels for each pixel in the image. [\(Source\)](#)

Brain Computer Interface (BCI)



And many more