CSC 9010-002

Yiran Yu

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1. **name of topic:**

pick an algorithm or family of algorithms to study

1. **algorithm or domain topic:**

Predictive analytics: Software and/or hardware solutions that allow firms to discover, evaluate, optimize, and deploy predictive models by analyzing big data sources to improve business performance or mitigate risk.

1. **Name/url of 2-4 related sites**
2. **Predictive scoring:** This method analyzes how leads are responding to your marketing attempts and how likely they are to take action based on that information. In this way, you can more quickly identify which leads to focus more resources on and which to divert resources from.
3. **Identification models:** This use case is an approach that focuses on comparing leads to customers who have taken actions in the past. In doing so, you can divert resources to those leads who are most promising based on previous actions they have taken, as well as identify new markets that you weren’t previously aware of.
4. **Personalization:** In concert with predicting which leads are most likely to take which actions, the same data can be used to determine which leads respond best to which types of messaging. This advanced form of segmentation can take things deeper than simply splitting leads into groups – instead sending them much more personalized messages.
5. **Cluster models:** Clustering is a way of segmenting customers into groups based on many variables. A cluster model looks for correlations between various attributes and identifies a number of equilibria in which certain types of attributes tend to accumulate. What makes clustering special, compared with traditional segmentation, is the sheer number of variables involved. Clusters often use 30 variables or more, far more than would be possible if you were manually segmenting customers, or even if they were manually segmenting themselves.
6. **URL of 2-4 datasets that might be applicable to the topic**
7. <https://www.sas.com/>

SAS is the leader in analytics, and these analytics are helpful to show the predictive result for some business and studies based on Big Data.

1. <https://www.ibm.com/analytics/predictive-analytics>

Predict with confidence what will happen next so you can make smarter decisions for your organization. IBM is the leader in data science platforms.

1. <https://www.mathworks.com/products/matlab.html>

Companies are finding innovative ways to apply predictive analytics using MATLAB® to create new products and services, and to solve long-standing problems in new ways.

1. <https://www.sap.com/products/analytics/predictive-analytics.html>

Create, deploy, and maintain thousands of predictive models with SAP Predictive Analytics. This on-premise product can help you anticipate future behavior and outcomes – and guide better, more profitable decision making across your digital business.

**e) what makes this topic interesting  for you to explore**

Predictive algorithm is one of the most widely used algorithms in the current application field, which can more integrate people's daily work and life.