




# Predictive Analytics, Classification, and Decision Trees

Building classification and decision trees

# Agenda

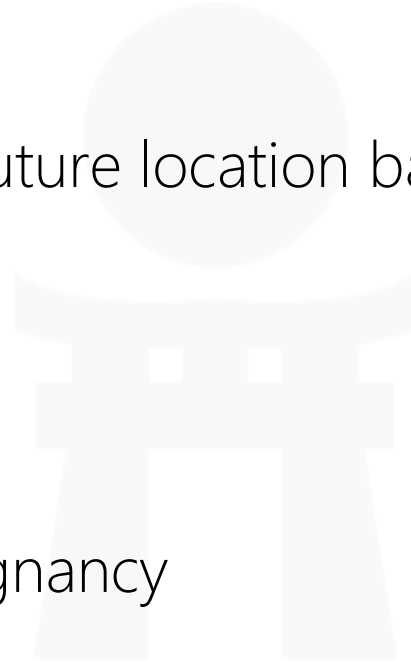
- Introduction to predictive analytics
  - Introduction to classification
  - Decision tree classifier
  - Hands-on Lab: Building a decision tree classifier using R
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# Introduction to Predictive Analytics

A faint, light gray background graphic of a person standing and holding a tablet computer. The person's head is a simple circle, and their body is a simple rectangle with two legs. The tablet is held in front of their chest.

# Family and Personal Life

- Location
  - Microsoft and Nokia predict future location based on cellular phone and location data
- Life Events
  - Target predicts customer pregnancy
- Divorce and infidelity
  - University and clinical researchers can predict this as well!



# Friendship and Dating

- Friendship and connection
  - Facebook and LinkedIn predict your personal connections
- Love
  - Every dating site tries to predict potential matches
  - “OkCupid” tracks which message content is most likely to elicit a response

# Telcos, Retail, and More

- FedEx
  - Predicts defection to a competitor with 65-90% accuracy
- Amazon
  - 35% of sales come from product recommendations

