The background of the slide is a complex, abstract composition. It features a dark, muted purple or brownish background. Overlaid on this are several geometric and data-like elements. In the upper and lower portions, there are dense networks of thin, light-colored lines forming a mesh or web-like structure. Scattered throughout these areas are numerous small, colored dots in shades of green, blue, and orange. In the center, there is a large, white, angular shape that resembles a stylized letter 'A' or a large triangle, which serves as a backdrop for the title. To the left of this central shape, there is a smaller, rectangular inset image showing a cluster of orange and red dots on a light background, with a horizontal band of pinkish squares overlaid. The overall aesthetic is technical and modern, suggesting themes of data science, machine learning, or network theory.

Lecture 9. Pattern- Based Classification

Lecture 9. Pattern-Based Classification

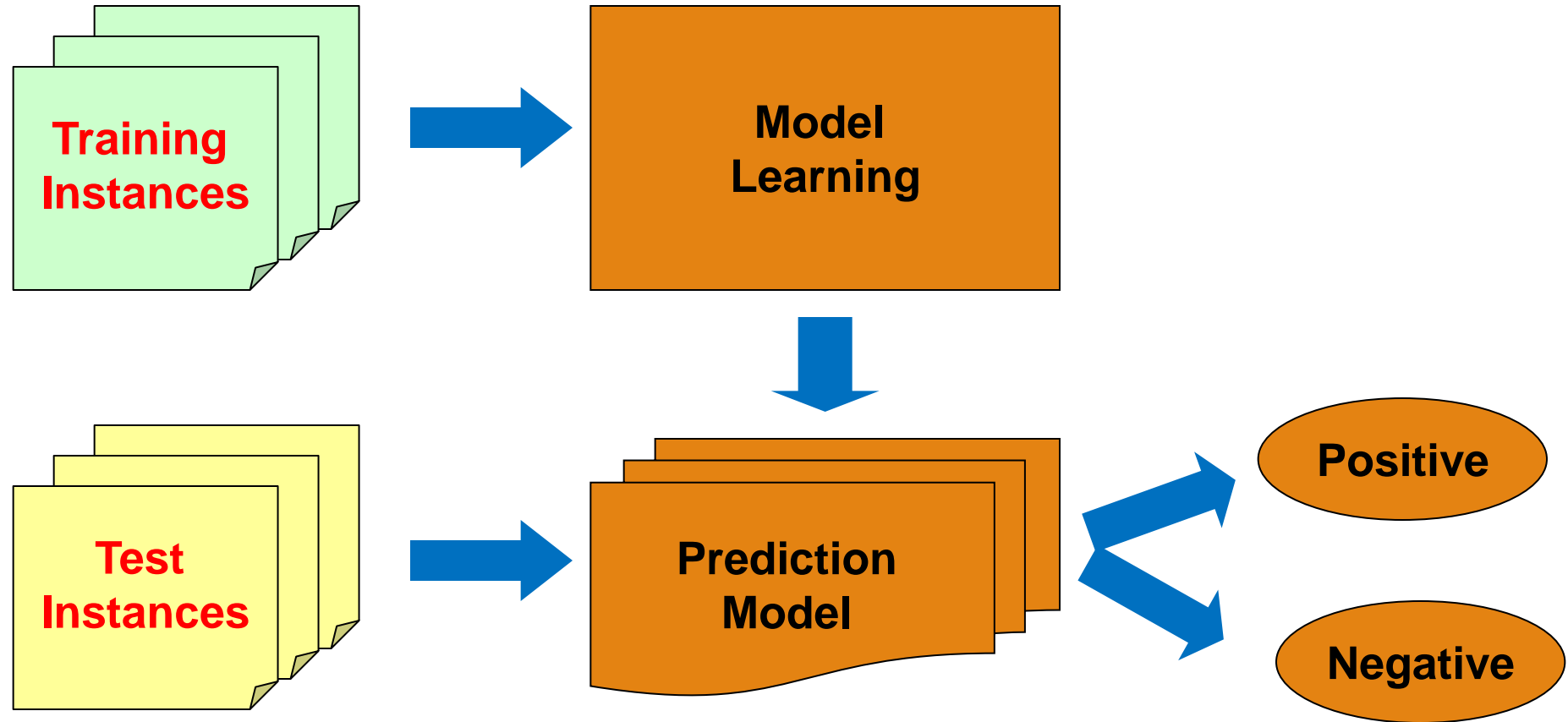
- ❑ Classification: Basic Concepts
- ❑ Pattern-Based Classification
- ❑ Associative Classification
- ❑ Discriminative Pattern-Based Classification
- ❑ Direct Mining of Discriminative Patterns

Thanks to Hong Cheng@CUHK for her contributions

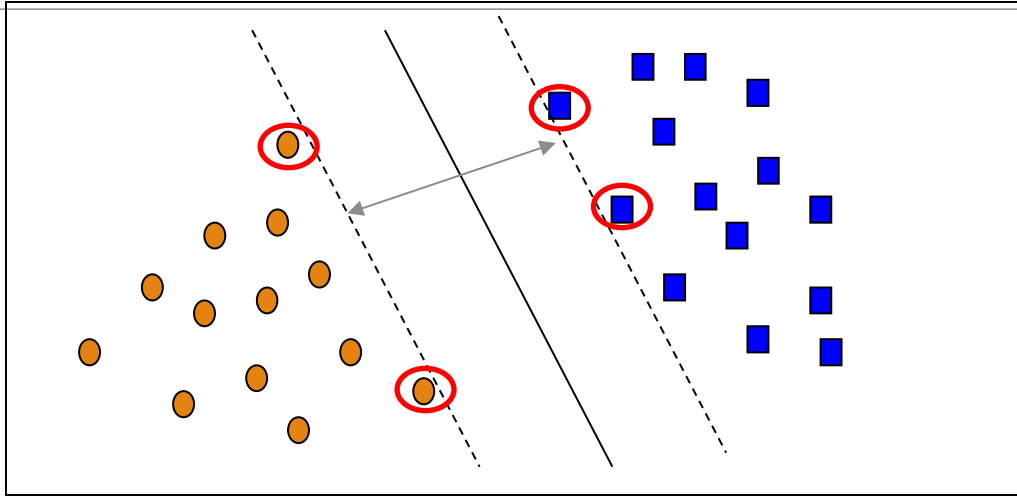
The background of the slide is a complex, abstract composition. It features a dark, muted purple or brownish-grey base. Overlaid on this are several geometric and data-like elements: a network of thin, light-colored lines forming a mesh or web; numerous small, green and blue dots scattered across the field; and a prominent, lighter-colored, semi-transparent geometric shape (a large triangle or polygon) that serves as a backdrop for the title. In the bottom-left corner, there is a small, rectangular inset image showing a cluster of orange and red dots, possibly representing a specific data set or a celestial body like a galaxy.

Session 1. Classification: Basic Concepts

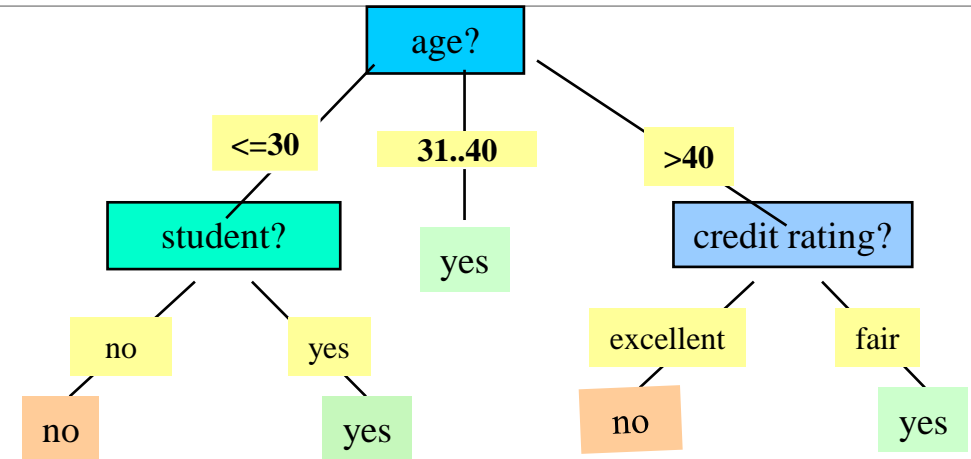
What Is Classification?



Typical Classification Methods

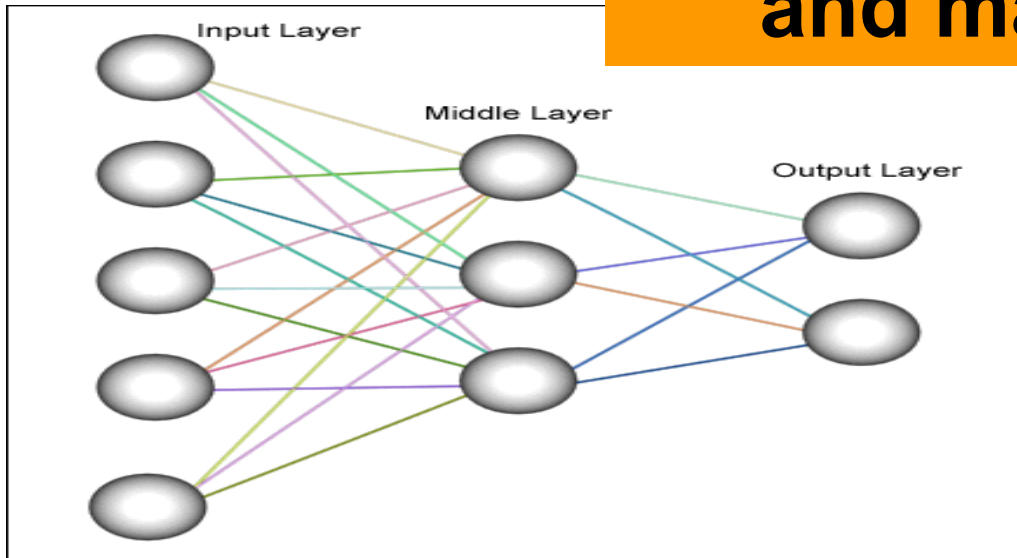


Support Vector Machine

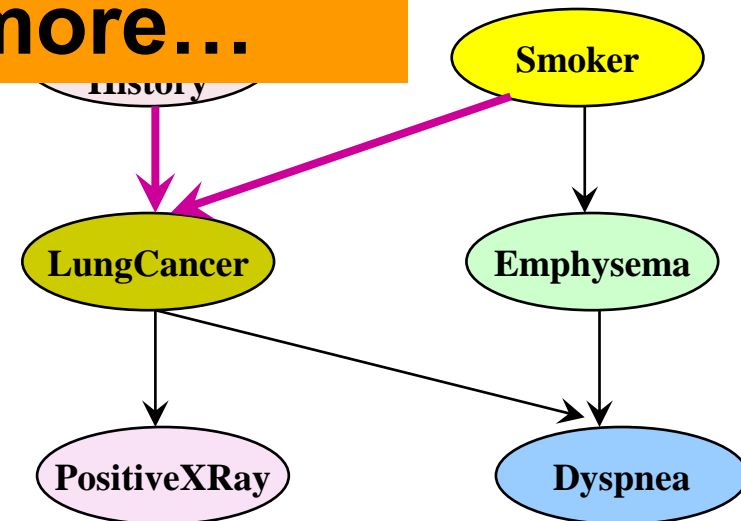


Decision Tree

and many more...



Neural Network



Bayesian Network

Numerous Classification Applications

