



Department of Computer Science
UNIVERSITY OF COLORADO **BOULDER**



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LECTURE 1B

Roadmap

- Introductions
- Content Questions
- Administrivia Questions
- KNN Example
- Homework 1

Outline

Introductions

Content Questions

Administrivia Questions

KNN Example

Introductions

Outline

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Content Questions

Administrivia Questions

KNN Example

Content Questions

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Outline

Introductions

Content Questions

Administrivia Questions

KNN Example

Administrivia Announcements

- If you're not enrolled and there's not physically room in the classroom, please leave
- Offered again next year (perhaps in Spring)

Administrivia Questions

Administrivia Questions

Administrivia Questions

Administrivia Questions

Outline

Introductions

Content Questions

Administrivia Questions

KNN Example

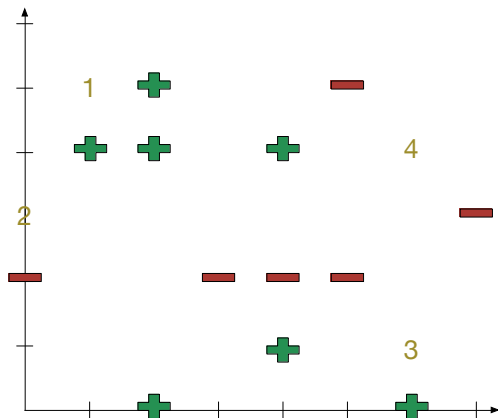
KNN Classification

$$K = 1$$

What is the prediction of y_1 ?

Closest points:

Prediction:



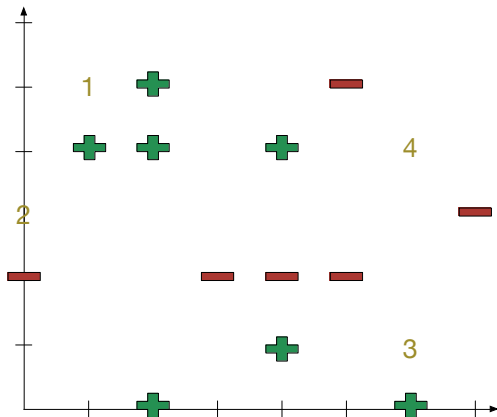
KNN Classification

$$K = 1$$

What is the prediction of y_2 ?

Closest points:

Prediction:



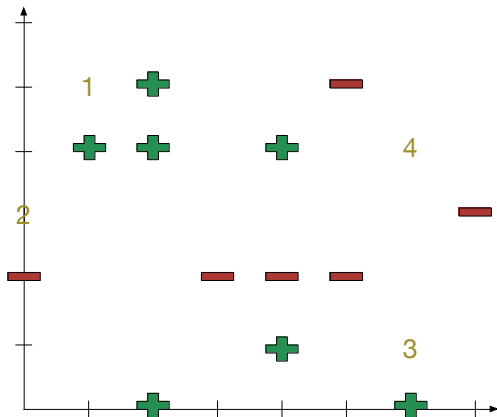
KNN Classification

$$K = 1$$

What is the prediction of y_3 ?

Closest points:

Prediction:



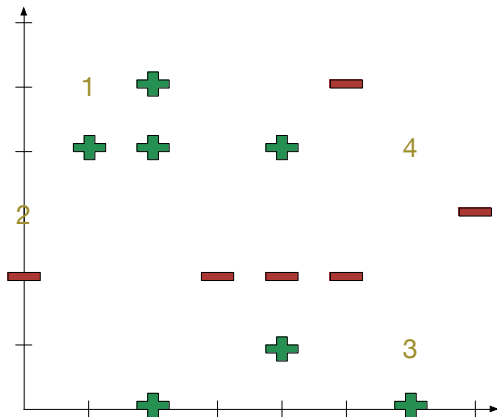
KNN Classification

$$K = 1$$

What is the prediction of y_3 ?

Closest points:

Prediction:



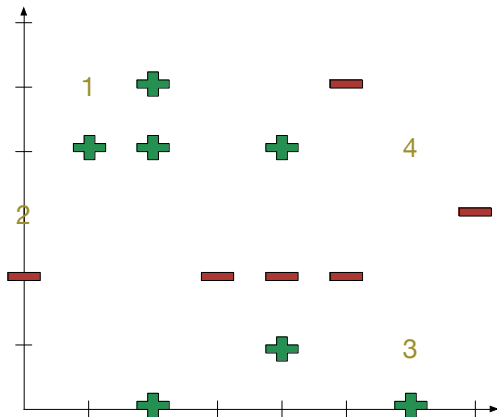
KNN Classification

$K = 2$

What is the prediction of y_1 ?

Closest points:

Prediction:



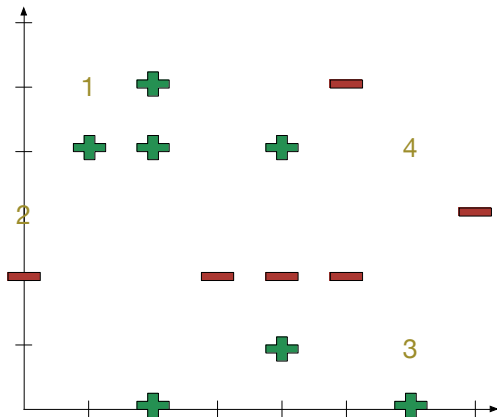
KNN Classification

$K = 2$

What is the prediction of y_2 ?

Closest points:

Prediction:



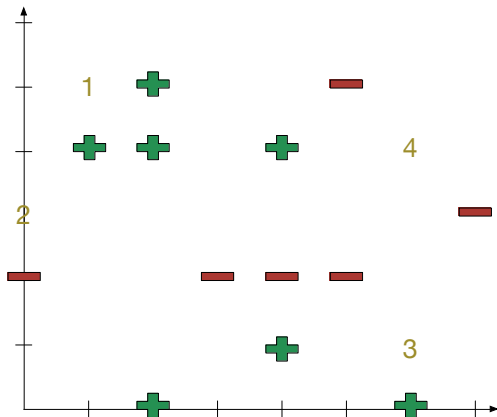
KNN Classification

$K = 2$

What is the prediction of y_3 ?

Closest points:

Prediction:



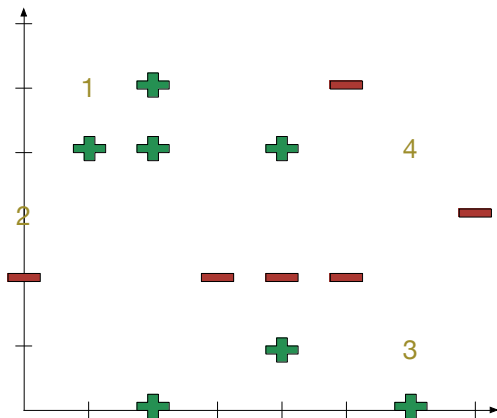
KNN Classification

$K = 2$

What is the prediction of y_3 ?

Closest points:

Prediction:



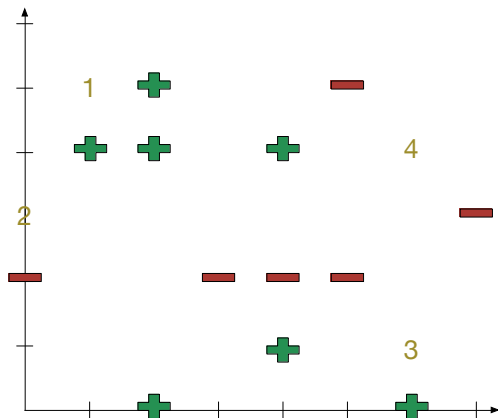
KNN Classification

$K = 3$

What is the
prediction of y_1 ?

Closest points:

Prediction:



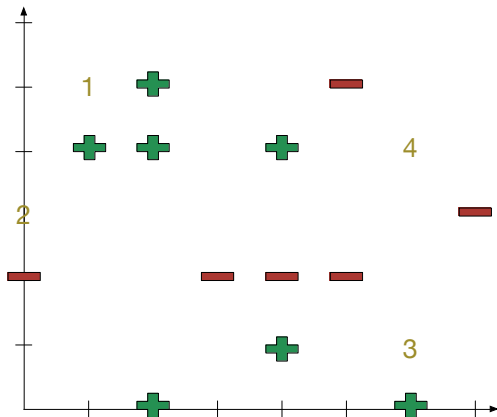
KNN Classification

$K = 3$

What is the
prediction of y_2 ?

Closest points:

Prediction:



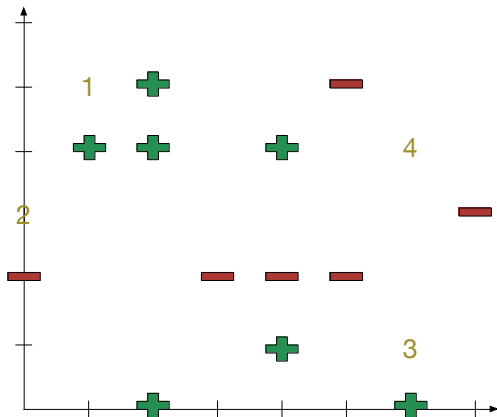
KNN Classification

$K = 3$

What is the
prediction of y_3 ?

Closest points:

Prediction:



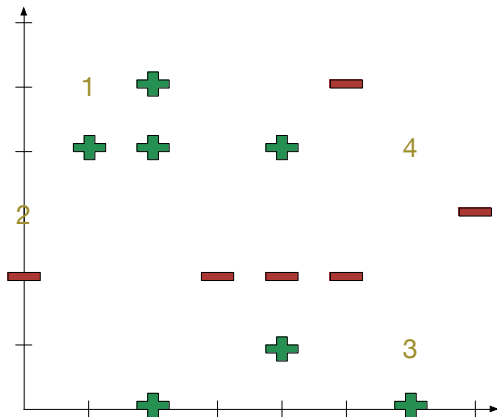
KNN Classification

$K = 3$

What is the
prediction of y_3 ?

Closest points:

Prediction:



HW1

- Now posted
- Designed to be easy
- Main goal: comfortable with Python / infrastructure