



Overfitting and Underfitting

Overfitting and Underfitting



Student A



Student B



Student C

Overfitting and Underfitting



Student A



Student B



Student C

- Distracted
- Does not perform well in class

Overfitting and Underfitting



Student A

- Distracted
- Does not perform well in class



Student B

- Memorizes Concepts
- Best performer in class



Student C

Overfitting and Underfitting



Student A

- Distracted
- Does not perform well in class



Student B

- Memorizes Concepts
- Best performer in class



Student C

- Understands concepts
- Decent performer in class



Surprise Test results: Understanding based Q's

Overfitting and Underfitting



Student A



Student B



Student C



- Random guesses
- **50%** overall

Overfitting and Underfitting



Student A

- Random guesses
- **50%** overall



Student B

- Caught off guard
- **70%** overall



Student C

Overfitting and Underfitting



Student A

- Random guesses
- **50%** overall



Student B

- Caught off guard
- **70%** overall



Student C

- Solves methodically
- **90%** overall

Overfitting and Underfitting



Student A

- Random guesses
- 50% overall



Student B

- Caught off guard
- 70% overall



Student C

- Solves methodically
- 90% overall

Good Fit Model

Overfitting and Underfitting



Student A

- Random guesses
- 50% overall



Student B

- Caught off guard
- 70% overall

Overfitting Model



Student C

- Solves methodically
- **90% overall**

Good Fit Model

Overfitting and Underfitting



Student A

- Random guesses
- 50% overall

Underfitting Model



Student B

- Caught off guard
- 70% overall

Overfitting Model



Student C

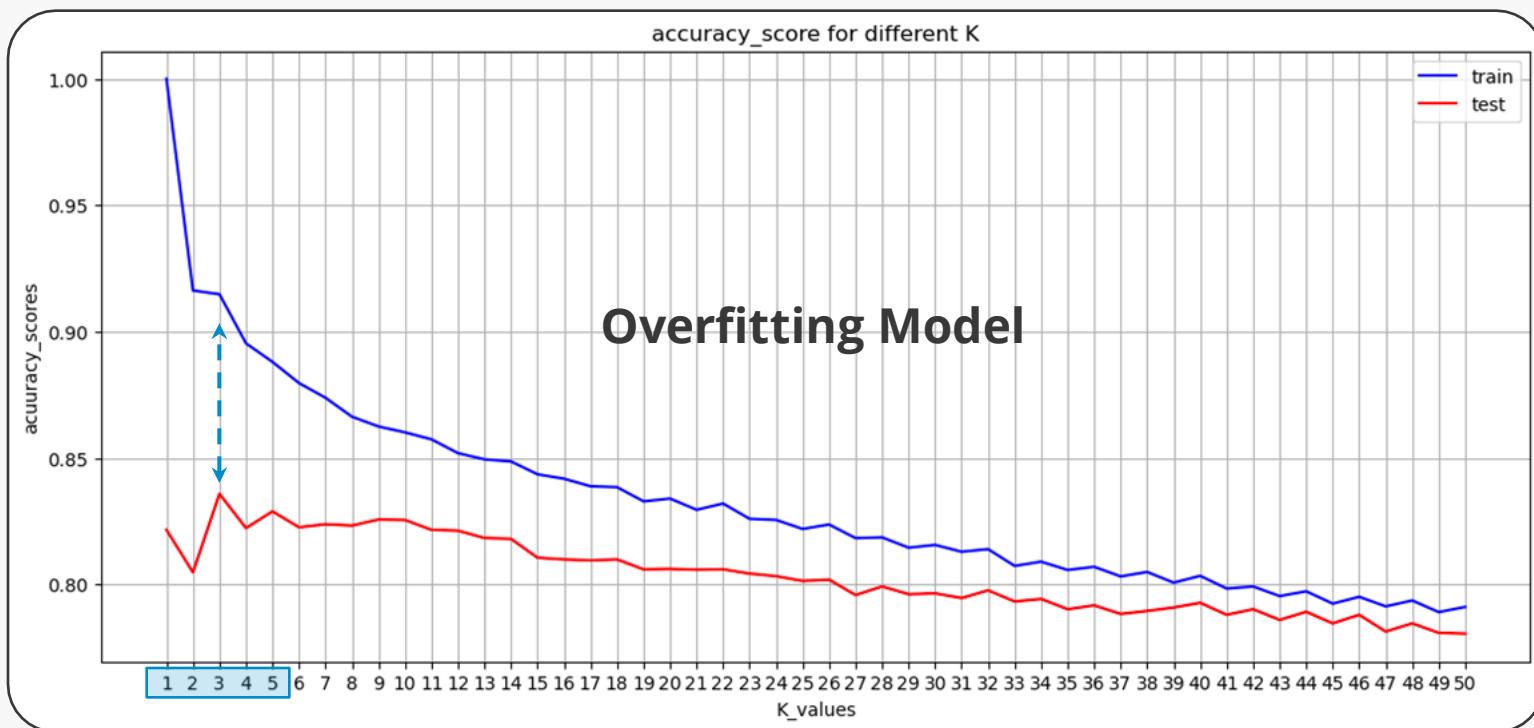
- Solves methodically
- **90% overall**

Good Fit Model

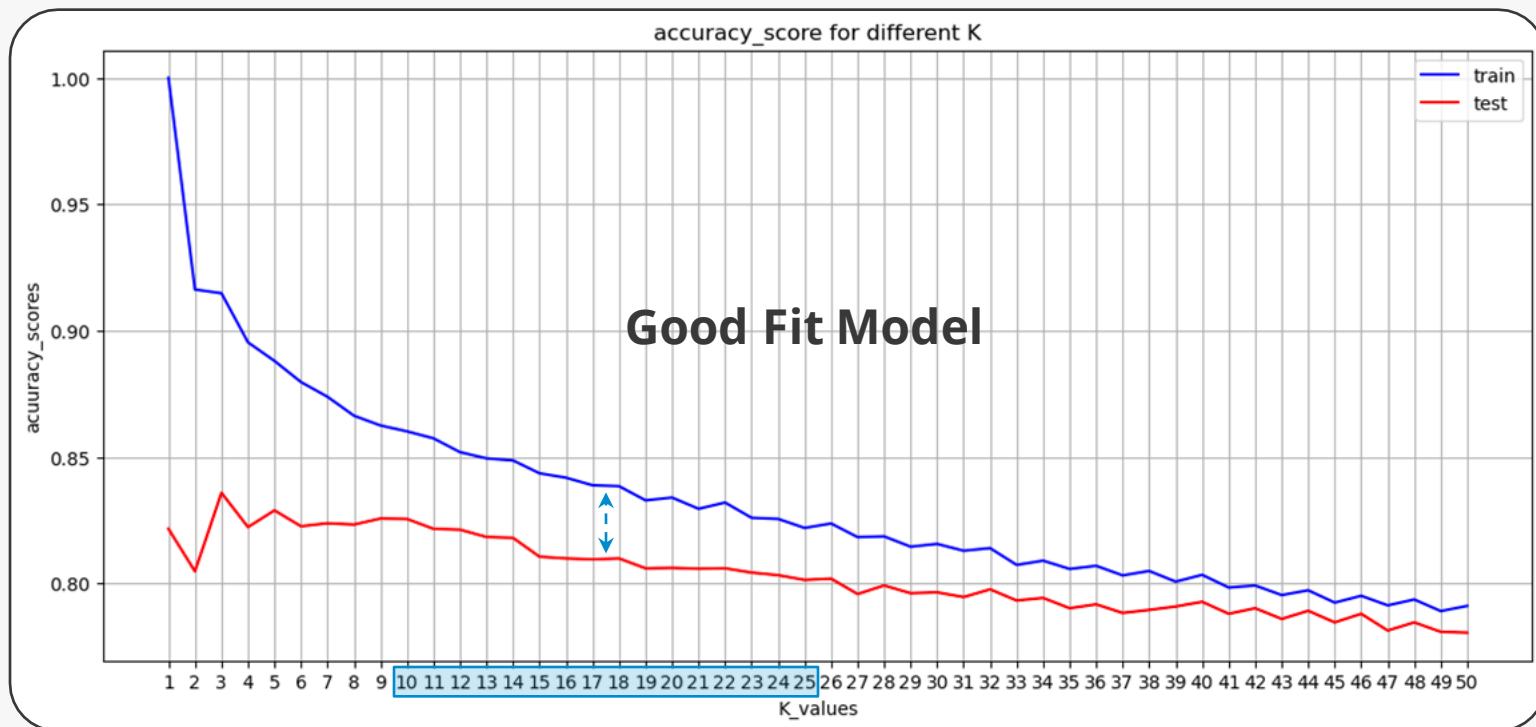


Comparing these results
with our KNN model

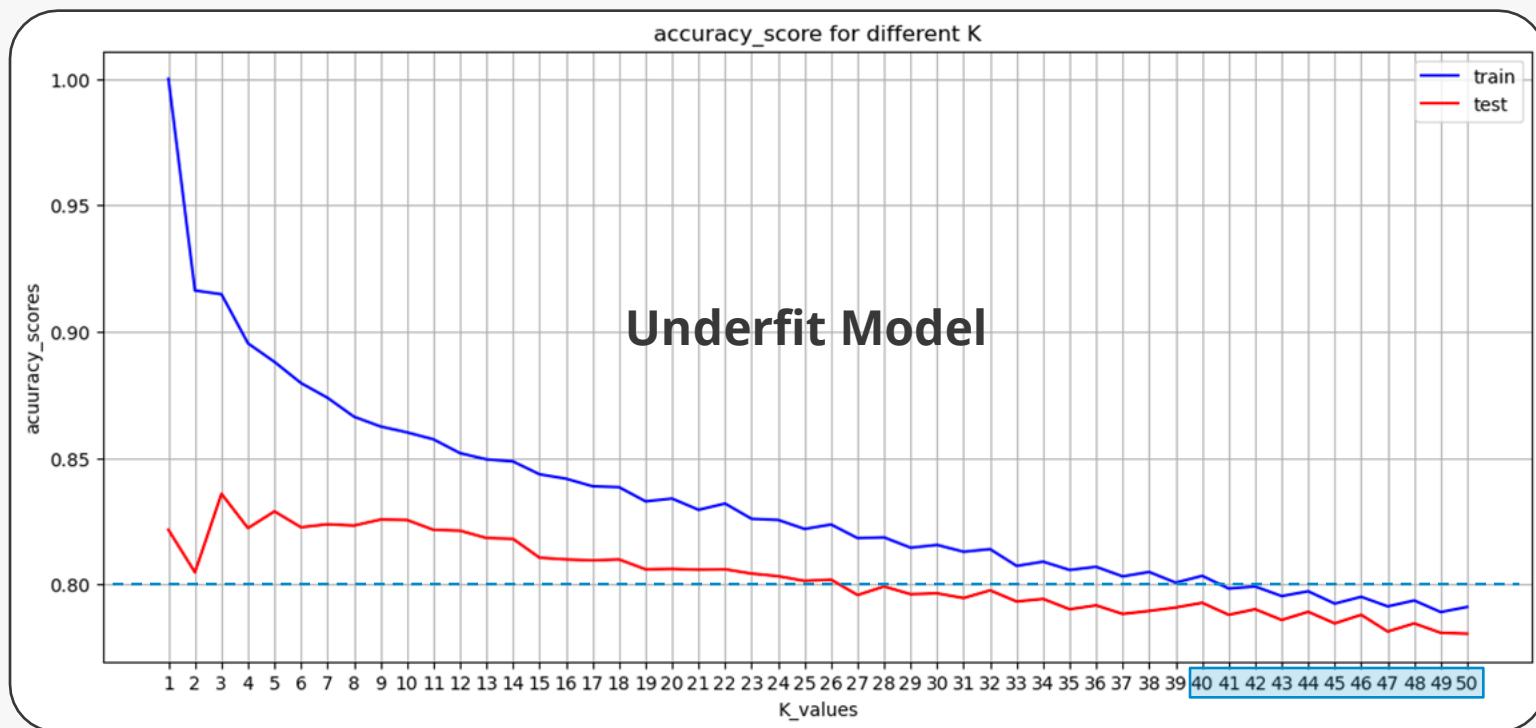
Types of Models



Types of Models



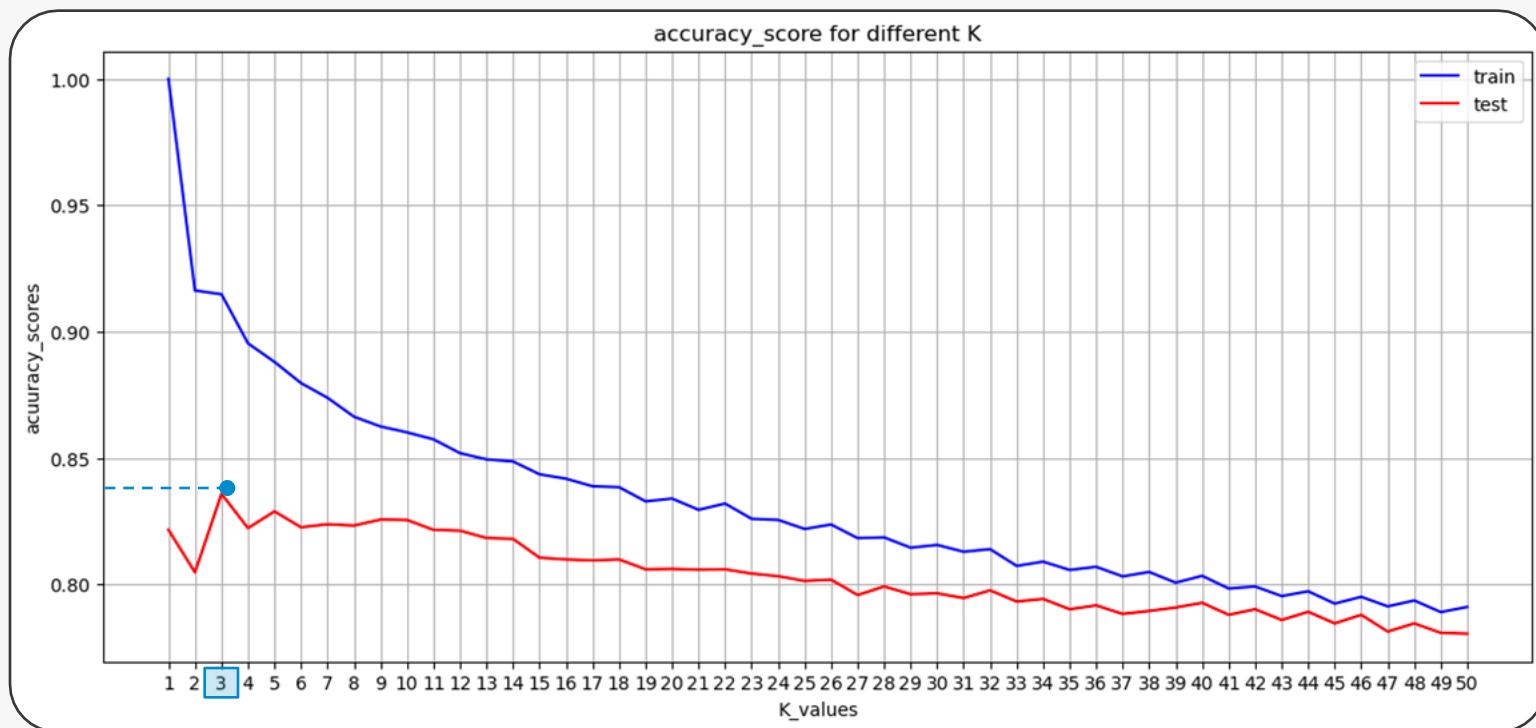
Types of Models





Which model should we
choose for Synergix?

Best-Performing Model



Consistent Model

