

Algorithms

Supervised & Unsupervised learning
algorithms

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Types of models (algorithms)

Is this A or B?

Predicting **categories** (two-class or multi-class)

Type of ML Problem	Description	Example
Classification	Pick one of N labels	Cat, dog, horse, or bear
Regression	Predict numerical values	Click-through rate
Clustering	Group similar examples	Most relevant documents (unsupervised)
Association rule learning	Infer likely association patterns in data	If you buy hamburger buns, you're likely to buy hamburgers (unsupervised)

How much -or- how many?

Predicting **numerical values**

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How is this organized?

Discovering **structure**

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Are there relationships between variables?

Identify strong **rules**

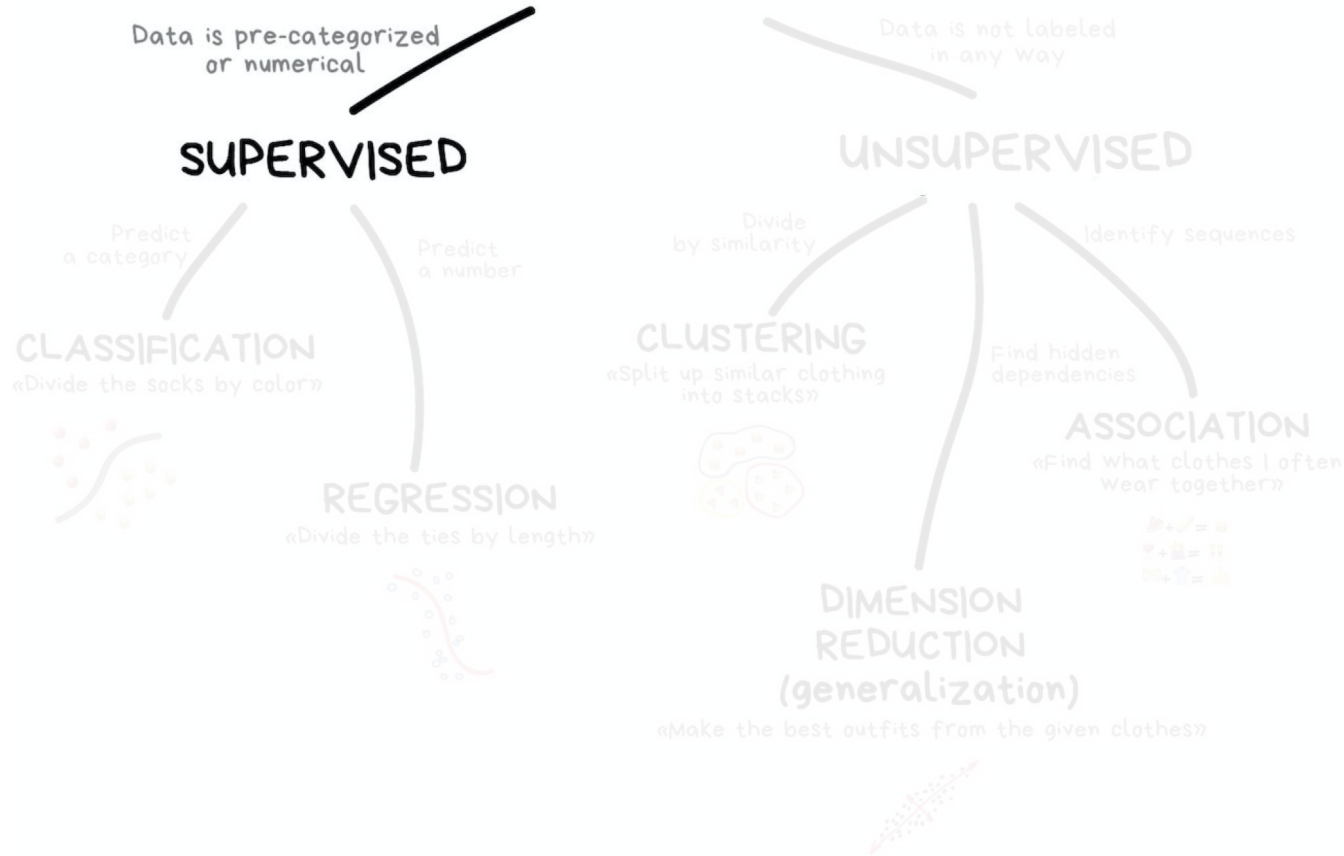
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Types of models we will cover in this course

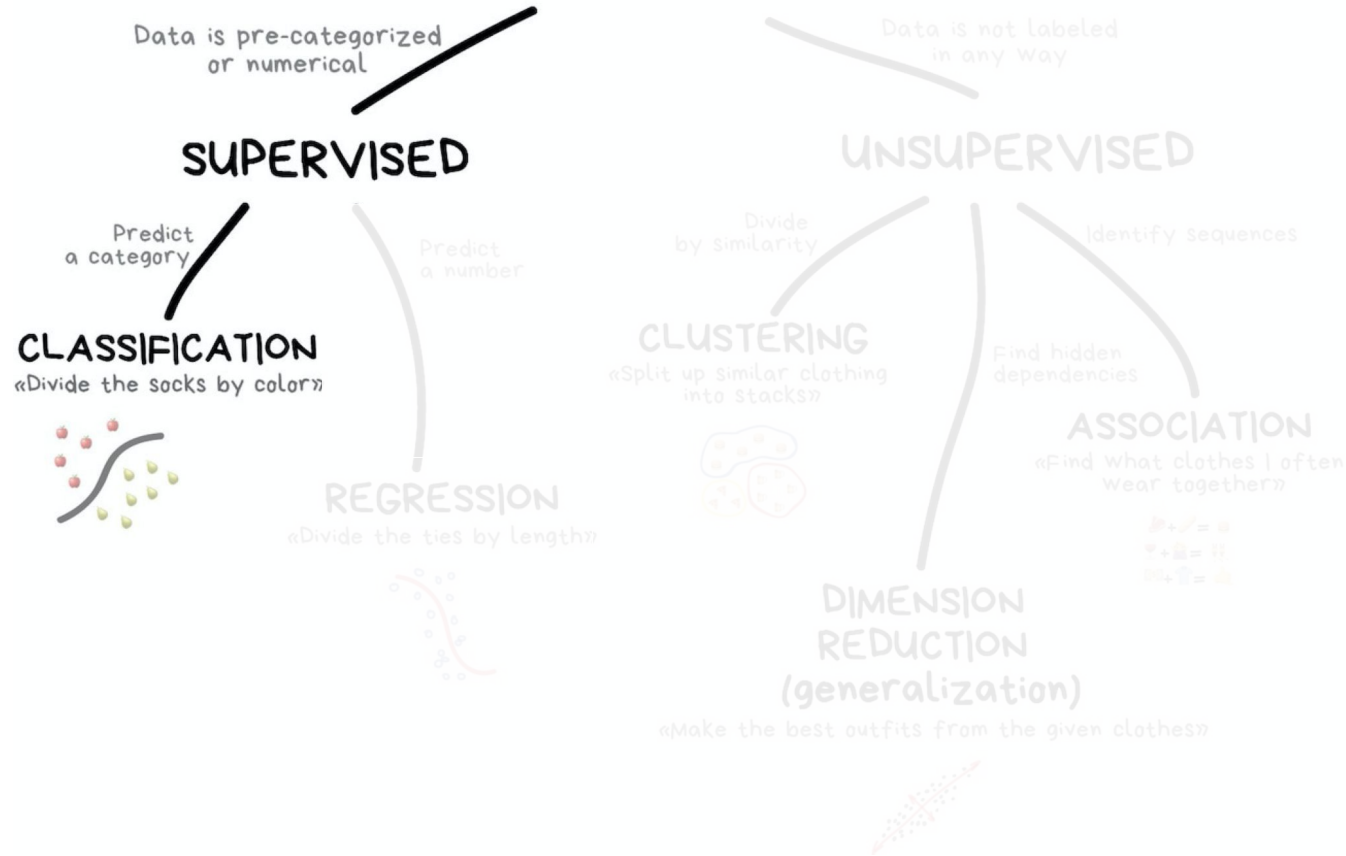
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Model categorization

Models



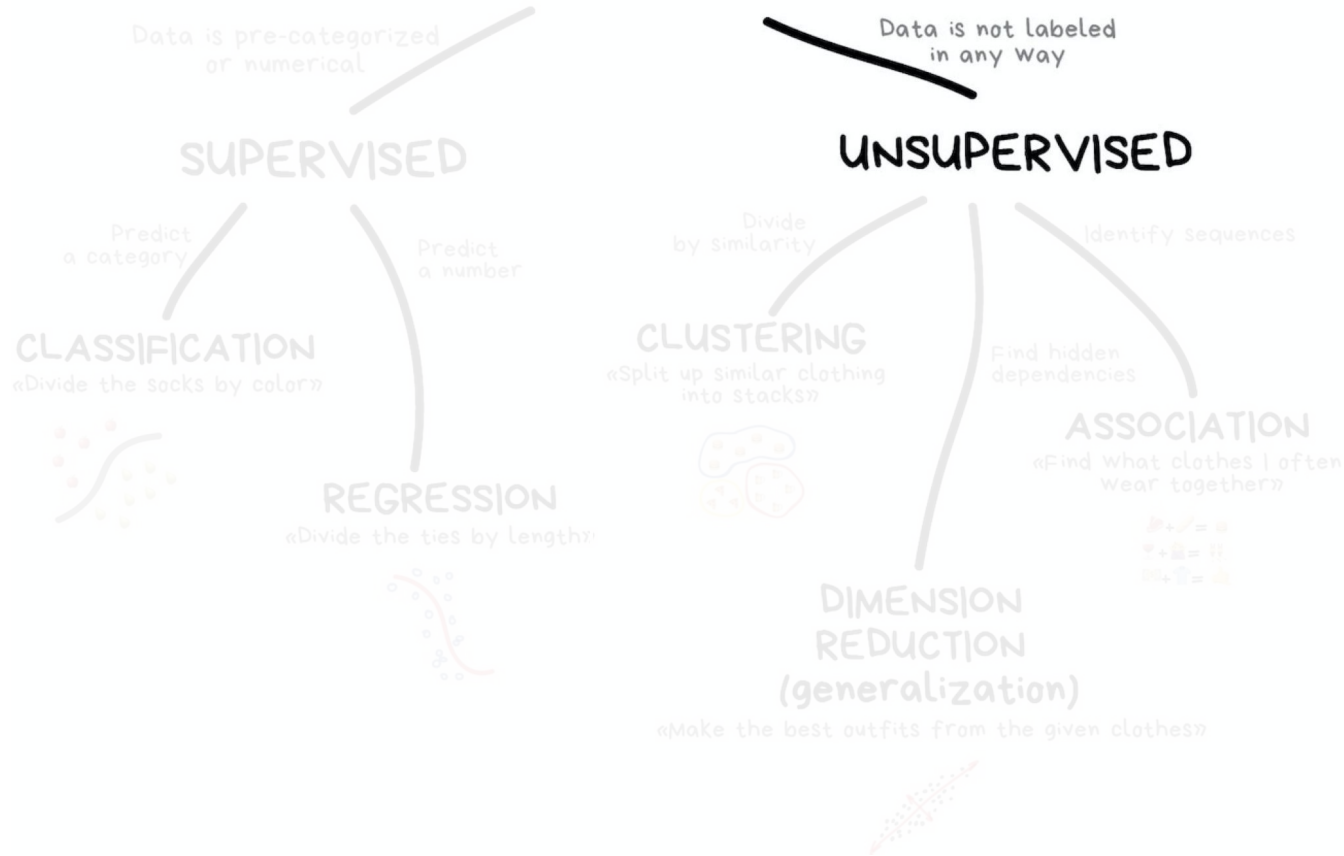
Models



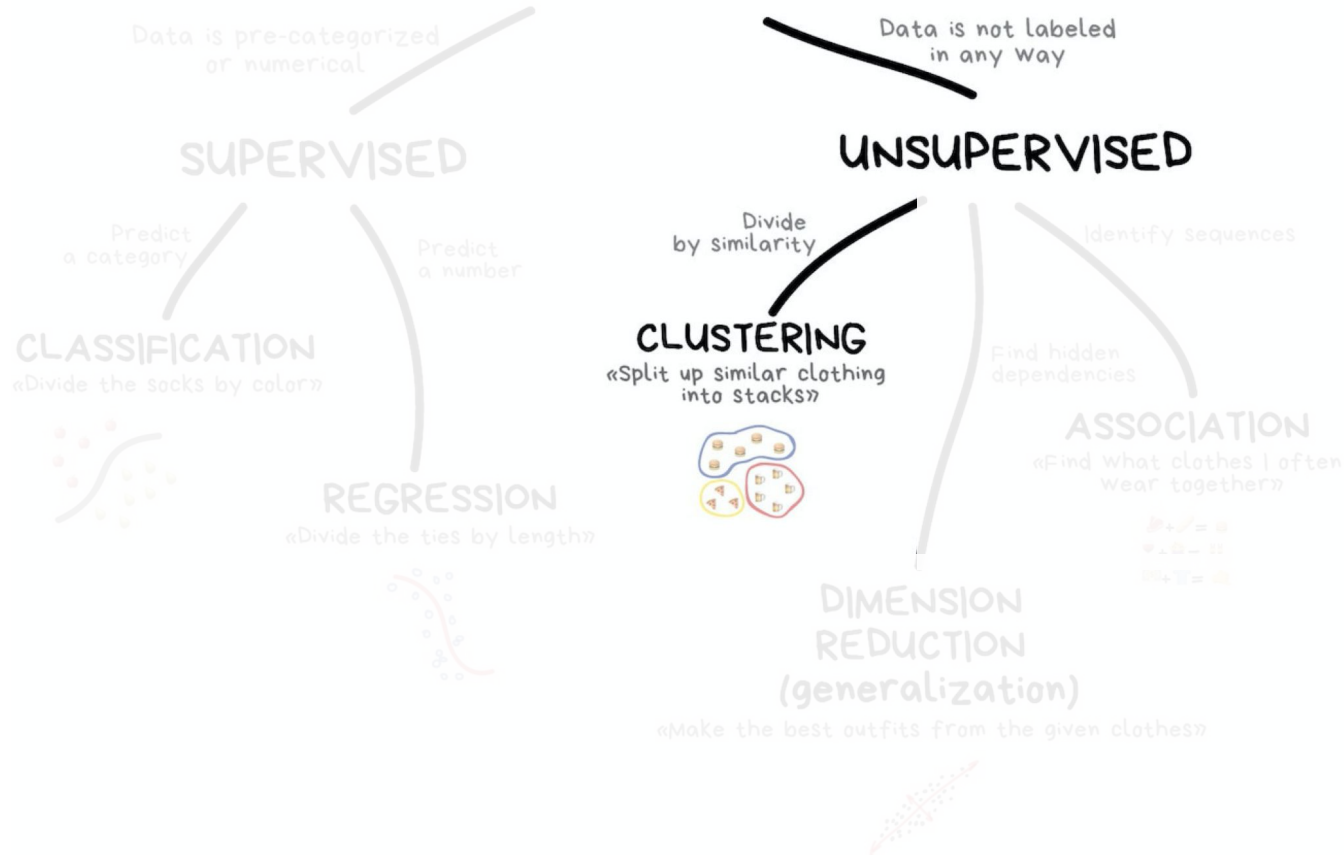
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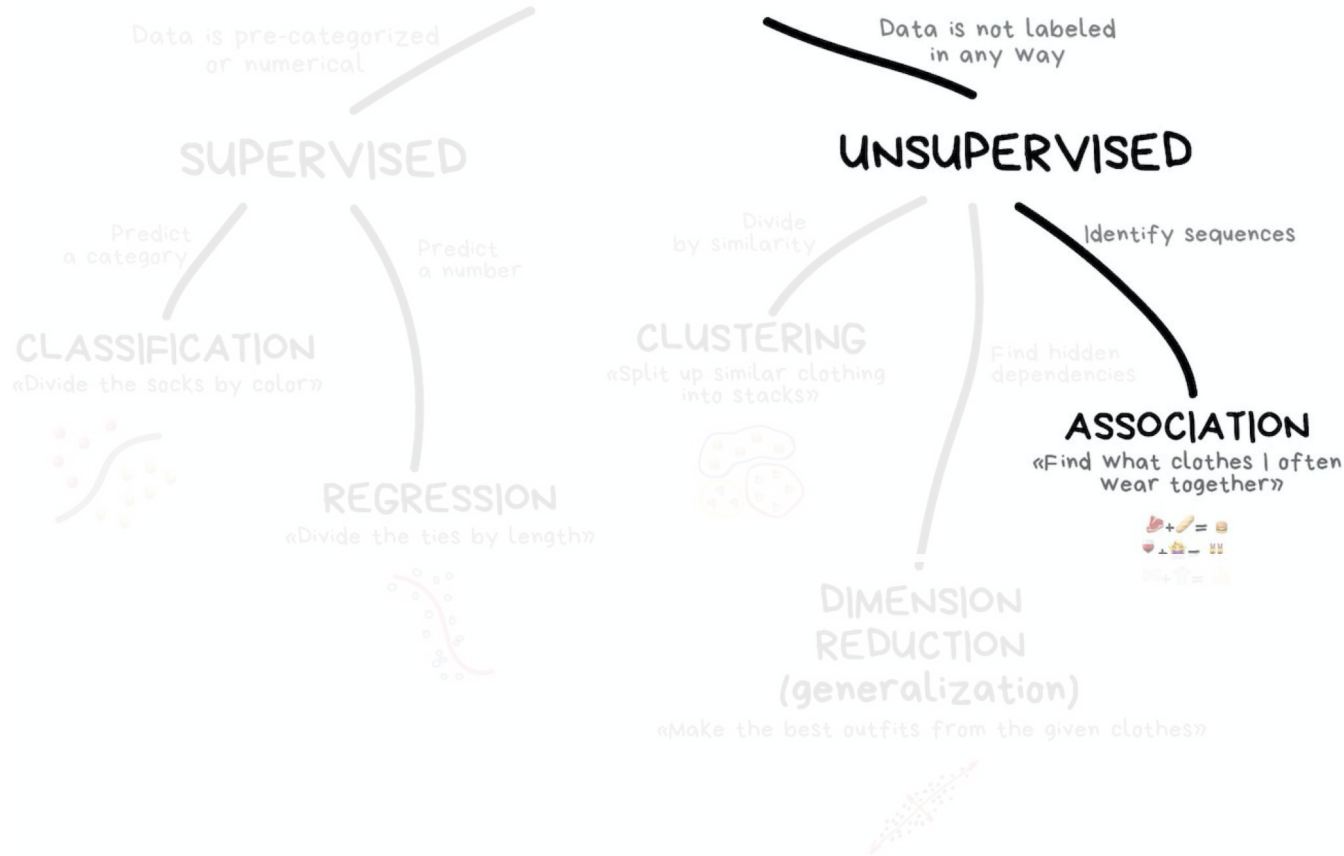
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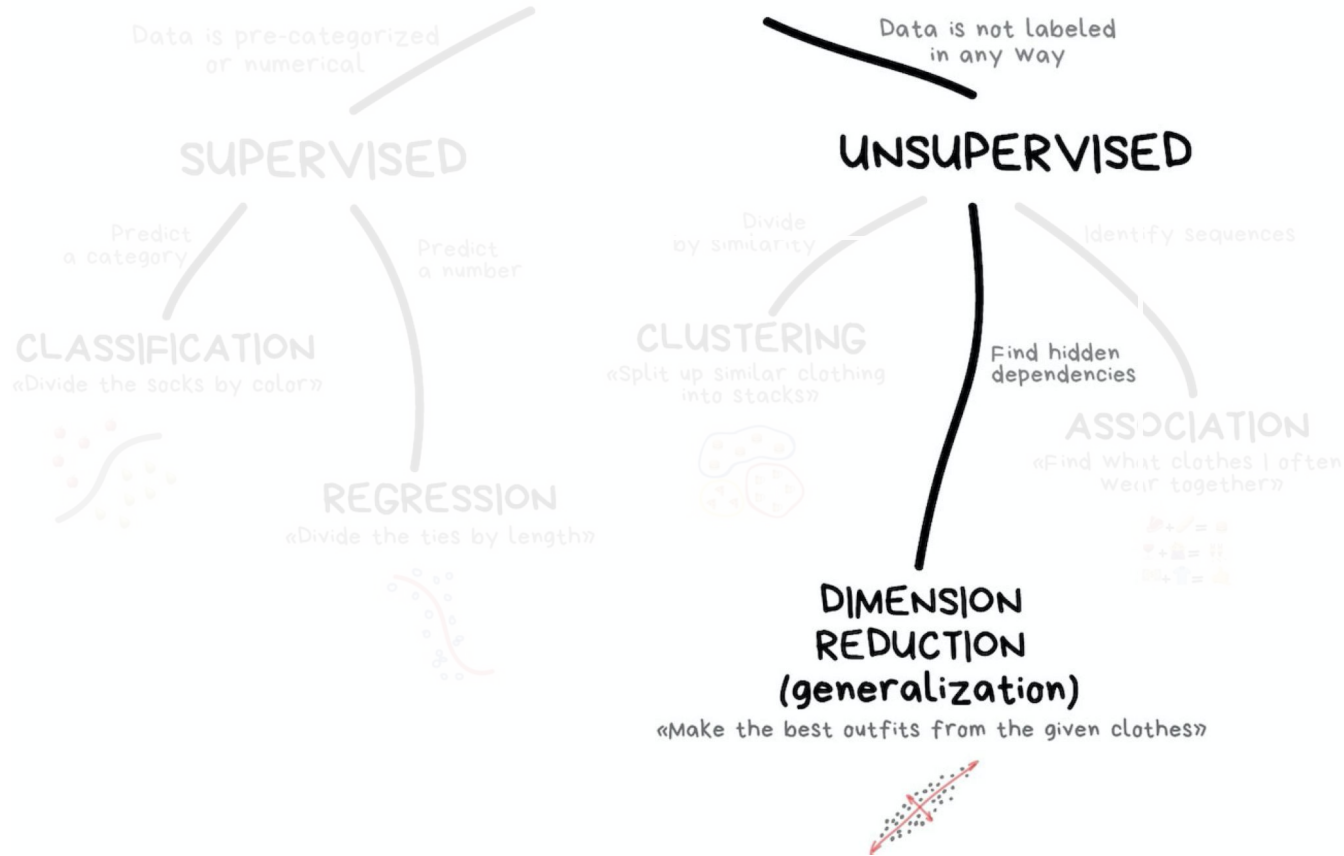
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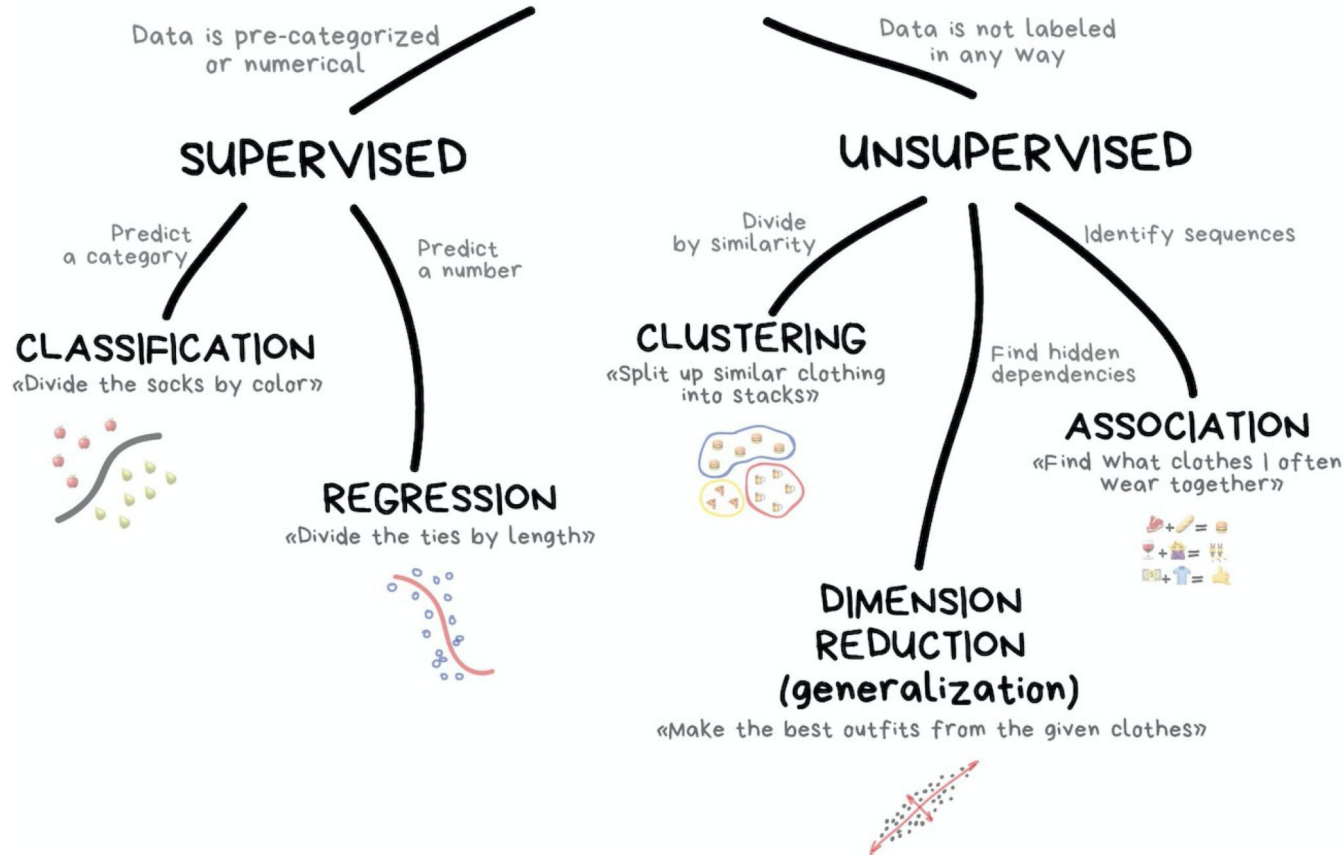
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Models



Models



Algorithms

