# Transcript: ""AI algorithms”

 *[Text reads: "AI algorithms."]*

A waste basket, a sealed envelope and a mailbox appear around a laptop.

**Voice Over:** Ever wondered how your email knows what’s junk and what’s not?

*[A phone screen reads: "Ambient house lounge hits."]*

**Voice Over:** Or how does your music app always hit the right note with its recommendations?

*[Text reads: "AI algorithms. AI algorithms are step-by-step instructions given to a computer to solve specific problems or perform tasks."]*

**Voice Over:** That’s all thanks to something called AI algorithms.

Butter, flour, oil and eggs appear around a laptop. Then, a recipe for apricot cake appears.

**Voice Over:** Imagine these algorithms as a set of instructions that guide a computer to solve a problem, much like a recipe guiding you to bake a cake.

The laptop screen reads "AI."

*[Text boxes read: "Machine learning is a data science technique that allows computers to use existing data to forecast future behaviors, outcomes and trends. Deep learning is a subfield of machine learning concerned with neural network algorithms inspired by the structure and function of the brain."]*

**Voice Over:** Machine learning, a subset of AI encompasses deep learning as one of its own subsets. These subsets represent different methodologies through which a computer system can learn from data to solve problems.

*[Text reads: "Supervised - algorithm is trained on labeled data. Unsupervised - algorithm is trained on unlabeled or raw data. Reinforcement - algorithm is trained by interacting with its environment to achieve a goal."]*

**Voice Over:** Within these, there are different learning methods like supervised learning, unsupervised learning, and reinforcement learning, and each of these methods

A list of instructions written in binary code appears next to a laptop.

**Voice Over:** uses a specific set of instructions, or algorithms, which guides the computer on how to solve a problem. And depending on the problem, the algorithm might be quite different.

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Envelopes appear.

*[Text reads: "Classification, optimization, regression, clustering."]*

**Voice Over:** There are a few main types of these algorithms. Imagine you’re sifting through your emails.

Flowers emerge from an envelope. A can of spam emerges from another.

**Voice Over:** Some are important, others... not so much.

Envelopes appear on a laptop screen. Some are labeled with a green checkmark, others with a red x.

**Voice Over:** How does your email service know which ones to put in your inbox and which ones to label as spam?

*[Text reads: "Classification."]*

An image of Sherlock Holmes appears.

**Voice Over:** That’s the work of a type of algorithm called classification. It’s like a detective, sorting each email into spam or not spam.

A house appears with a for sale sign. Dollar signs appear above.

**Voice Over:** Now, let’s say you’re house hunting. Ever wondered how real estate websites predict the price of a house?

 *[Text reads: "Regression."]*

The house appears in a circle, held by human hands.

**Voice Over:** They use a type of algorithm called regression. It’s like a fortune teller, predicting the future based on information like size, location, and other factors.

Music notes appear around a phone.

Ever noticed how your favorite music app always knows just the right song to recommend?

*[Text reads: "Clustering."]*

A DJ appears.

**Voice Over:** That’s clustering at work. It’s like a party planner, grouping together songs you like so it can suggest similar ones.

A pizza appears next to a map.

*[Text reads: "Optimization."]*

**Voice Over:** And when you’re hungry and waiting for your food delivery, an optimization algorithm is finding the quickest route to get your food to you.

A compass appears.

**Voice Over:** It’s like a navigator, always searching for the best solution.

A woman on a computer sits beneath a globe.

**Voice Over:** Data scientists use these and other types of algorithms to make sense of the world around us.

Animated superheroes fly around the globe.

**Voice Over:** They’re like the secret superheroes of the digital age, using their powers to make our lives easier and more convenient.

The woman, globe, and heroes appear on a laptop screen.

**Voice Over:** And the best part? These algorithms are getting more advanced every day, learning from the vast amounts of data we generate.

The Microsoft logo appears.