



More about the career

Imagine you have a superpower that allows you to teach a computer to see and understand the world, just like humans do. That's kind of what people who work in machine learning and computer vision do!

Let's start with **machine learning**. It's like teaching a computer to learn from examples. Think of it like teaching a pet. When you teach a dog a new trick, you show it what to do many times until it learns. In machine learning, instead of a dog, we use computers, and instead of tricks, we teach them to recognize patterns and make predictions.

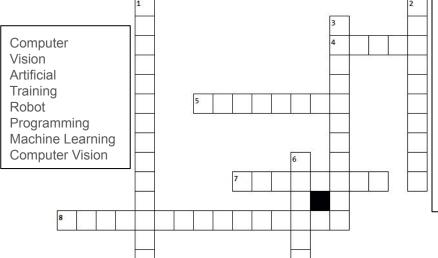
Now, think about **computer vision** as giving eyes to a computer. Computers are really good at crunching numbers and processing data, but they're not born with the ability to see images like we do. Computer vision helps them do that. It's like giving them eyes and a brain to understand what they see. So, if you show a computer a picture of a cat, it can learn to recognize it as a cat.

People who work in machine learning and computer vision get to do some really cool stuff. They teach computers to recognize faces, identify objects in photos, help self-driving cars see the road, and even diagnose diseases by looking at medical images like X-rays.

So, a career in machine learning and computer vision is all about teaching computers to see, learn, and make smart decisions, just like we do!

Raymond Yeh

Raymond Yeh is an assistant professor in the Department of Computer Sciences at Purdue University. His research is at the intersection of machine learning and computer vision. Specifically, his research focuses on developing algorithms to learn effective and explainable models ranging across several domains including audio, vision, language, and multi-agent systems. His most recent work has been on ambigrams, where words look the same when rotated 180 degrees (see picture at top)



Across

- 4. Computer program capable of performing tasks that require human intelligence
- 5. Electronic device for processing data
- Method used to improve the performance of a machine learning model
- 8. Study of algorithms that improve automatically through experience

Down

- 1. Field that gives computers the ability to see
- 2. Type of intelligence exhibited by machines
- 3. Act of providing instructions to a computer
- $\boldsymbol{6.}$ Giving computers the ability to understand and interpret visual information

