

#### Al for Beginners

GoSkills online course syllabus

Skill level Lessons Accredited by

Beginner 26 CPD

Pre-requisites Video duration Estimated study time

No prior experience needed 1h 28m

Instructor

Jim Sterne

#### Introduction

Introduction

This lesson will give you a conceptual framework so that you can articulate what artificial intelligence is and how powerful it can be.

# What is Artificial Intelligence?

Al: not what you see in the movies

Self-aware, robot warriors subjugating humanity is the stuff of science fiction. Science fact is far more interesting - and useful. After watching this lesson, you'll be able to identify the difference and how it helps keep you from sounding clueless,

How Al came about

Artificial intelligence has been on the drawing board for 70 years. After this lesson, you'll be able to discuss where Al has evolved from and why you are prepared to be using it successfully.

/ Al is an umbrella term

Today's new tools will dictate tomorrow's success. After this lesson, you'll be able to articulate what artificial intelligence is and how your marketing efforts can make the most of it.

# What is Natural Language Processing?

Ability to turn speech to text

Natural language processing is a large part of artificial intelligence. After this lesson you'll be able to identify how hard it is to turn speech to text, realize how you're using it already, and be able to see ways it might be useful.

Ability to turn text to meaning

Being able to read and being able to understand are different. After this lesson, you'll be able to see where a computer's ability to comprehend has limits.

- Ability to analyze meaning for sentiment
  - A huge portion of the brain is dedicated to grasping how others feel beyond what they say. After this lesson, you'll be able to critique a machine's inability to truly understand humans and why that's not so bad.
- Ability to imitate human speech

An artificial intelligence bot can converse with humans - even with voice. After this lesson you'll be able to explain the value and limitations of chatbots and smart speakers, how they might be useful, and where they are simply not ready for prime time.

Ability to write

Was this sentence written by a human? Are you sure? This lesson will help you discern how close computers are to writing like humans... and how far away they are.

# What is Computer Vision?

- 1 Recognize objects
  - How does a computer "see"? After this lesson you'll know how machines imitate vision for facial recognition and augmented reality.
- Interpret video + deep fakes

  Don't believe everything you see. This lesson raises some serious questions you should be asking about fake news and fake videos.
- 1 Computer vision uses

There are plenty of good uses for computer vision and video manipulation from shopping to Zoom backgrounds to medicine. After this lesson, you will be able to come up with new ideas about the future of computer vision.

# What is Machine Learning?

1 2 ML is a new way of programming

Machine Learning is very different from other programming. After this lesson you'll be able to converse knowledgably about the key fundamentals of machine learning and why it is so powerful.

1 / Supervised Learning

Supervised Learning lets you train the computer to identify objects, sounds, and patterns very quickly and at scale. This lesson will allow you to imagine whole new ways to use Machine Learning.

1 Unsupervised Learning

Unsupervised Learning can find patterns in data that humans would never see. After this lesson you'll be able to spot where this unique type of artificial intelligence can be used in all walks of life.

16 Reinforcement Learning

Reinforcement Learning is the workhorse of Al. After this lesson, you'll see how this tool can improve a wide variety of tasks that we used to think only humans could perform.

# **Putting Machine Learning to Work**

17 ML is good at these things

Artificial Intelligence is very good at two types of data manipulation: Dimensionality and cardinality. After this lesson, you'll be able to distinguish these two capabilities and identify where they can be put to work.

1 Q What AI needs to work

Al needs a lot of clean, trustworthy data and a very clear problem to solve. After this lesson, you'll have a better idea of when to NOT use artificial intelligence, that will make you the smartest person in any room.

1 O Checklist for Al projects

There are a few things you'll need to make an AI project successful. If you know these things and the sequence they come in, you'll be able to contribute to any AI project as a valuable member of the team.

**20** Al warnings

Artificial intelligence is not inherently dangerous, but it can cause you some problems. After this lesson, you'll be able to spot the issues that Al can cause.

#### The Human Side of Al

**71** Roles you might play

There are lots of different talents and skills needed to make AI work well. After this lesson, you'll be able to identify where you would be happiest and most productive on an AI project.

22 Augment yourself

You can use AI to give yourself superpowers. After this lesson, you'll have a clear picture of how you might train your own squad of AI-powered bots.

23 Why humans will always be needed

Al cannot do it all. This lesson points out where humans will always be needed. After this lesson, you'll know exactly where to focus your studies to ensure you'll always have a job.

#### The Future of Al

2 / Long list of uses

There are many ways AI is being used today. This lesson delivers a list of uses to help you understand the state of the art today.

**75** The future of Al

Al is such a new tool that we are still coming up with new ways to put it to work. After this lesson, you'll be able to see the possibilities and come up with your own new ideas.

#### Conclusion

26 In your hands
Congratulations—this is the end of the course, and the beginning of your Al journey.

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