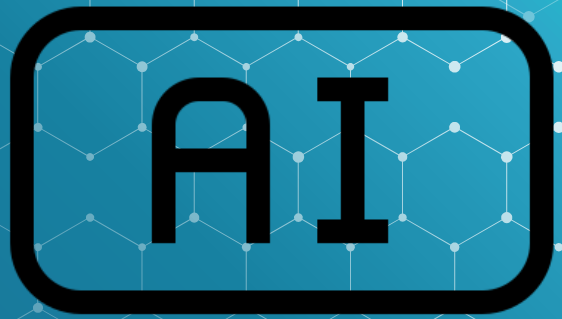
# Robotics Stem Career

TEAM 3383E




Career: Artificial Intelligence (AI) Engineer

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# HELLO!

We are team 3383E. We chose the Stem Career of an Artificial Intelligence (AI) Engineer!

Our team name is the

**Architects**

AI

# ARTIFICIAL INTELLIGENCE

A quick overview of it

# What is AI?

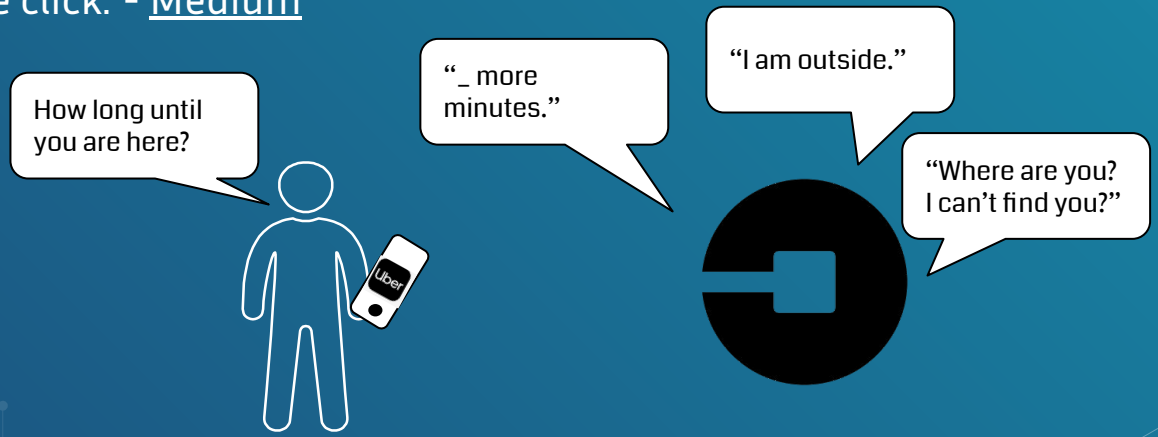
Artificial intelligence (AI) makes it possible for machines to learn from experience, adjust to new inputs, and perform human-like tasks. AI machines all operate with code, and some even pick up information as they experience new things- just like humans! Think of it like a baby who develops over time, learning from the many experiences it has gone through, developing each step it takes.


Artificial Intelligence examples:

- Self-driving cars are one example of an AI that inputs different situations as it learns it's surrounding.
- Schools and jobs use plagiarism scanners that are AI-Powered.
- Famous companies, "Uber" and "Lyft" uses AI-Powered technology to run their business faster and better.

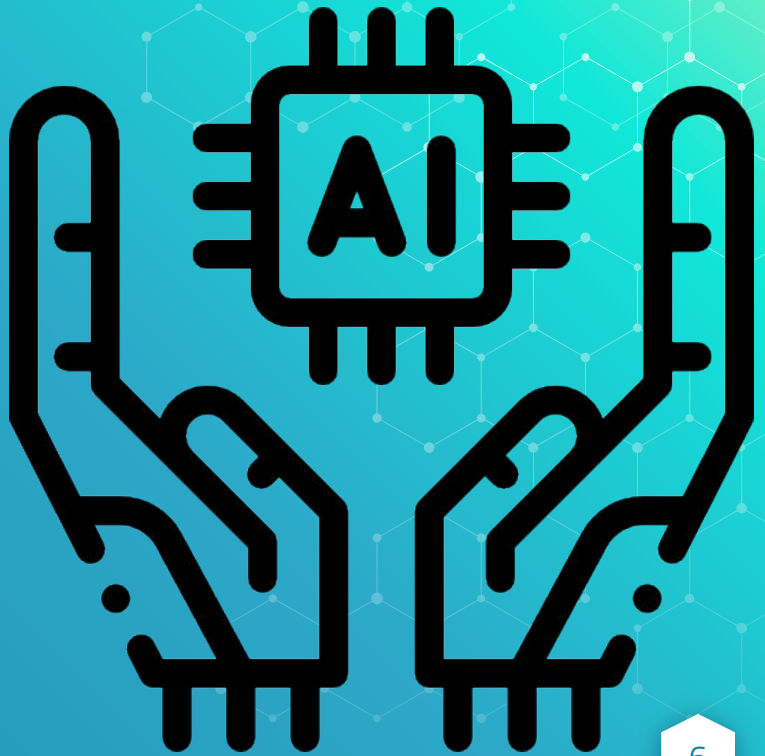
# A Quick Example of AI
# How Uber's "One Click Chat" using AI works.

"After a passenger writes a message to their driver, the Uber back-end service automatically sends it to Uber's machine learning platform Michelangelo, which uses natural language processing (NLP) to preprocess and encode the message, then generates prediction scores for possible intent. The service then provides the top four suggested replies based on prediction scores using a reply retrieval policy, and sends these back to the Uber driver, who can now respond to your question with a single click."- Medium



# Why Did Humans Create AI?

"The seeds of modern AI were planted by classical philosophers who attempted to describe the process of human thinking as the mechanical manipulation of symbols. This work culminated in the invention of the programmable digital computer in the 1940s, a machine based on the abstract essence of mathematical reasoning." - Wikipedia.



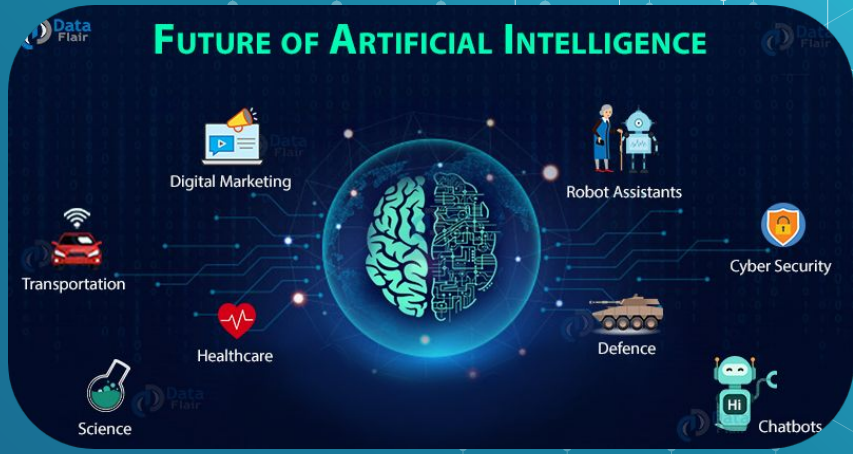
# How do you believe this career field will evolve over the next ten years?

The process of AI will become more advanced than it is right now. In just 10 years, a lot may happen. AI can be used in possibly over half the things we use! It develops each day, learning so many things as it progresses. It will be mind-blowing to see the whole AI in effect when 10 years have passed. So many things would be changed up, our whole system of living could change drastically. Remember the whole “Self-Driving Vehicle” trend that blew up? That could possibly become an entire lifestyle for many in the future. But, for AI to be popular, things need to be tested multiple times, because of possible glitches and such things that would overall effect the AI. AIs may grow very popular because of fascination and ease. AIs can be proved very useful in many things such as building and making everyday things more efficient.


This graph shows how fast AI is growing (According to **Google**)

# How do you believe this career field will evolve over the next ten years? (Continued)

Think of this as playing a game. You generally need to learn the overall functions of the game to play it. This is the development of AI, learning information along the way. When you get to problems, you find a way to go around it, right? Well this is the learning process of the AI, learning from its mistakes. And every single "step" the AI goes down its road, it's going to learn so much. This is the AI's evolution into something extraordinary, something fascinating. So 10 years from now, we're expecting a lot to happen. A lot, and I mean *a lot* more than what we have now.



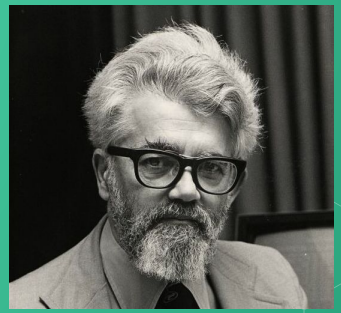

These are some of the things we expect from AIs in the future. (Image from Google)

Do you know when the *Amazon Alexa* asks you "*Did I answer your question?*" from time to time? This is its learning process, they are learning from you. From there on, the AI changes up their sort of "road" they go down. It is evolving from its experiences, and the *Alexa* scenario is a very good example of how AI is tested.

# The Successors of Artificial Intelligence

Who created AI? This topic may have a few different opinions. Some may think, John McCarthy was the “father” of AI. Although Newell and Simon may be considered the first AI program, John McCarthy was the one who named the item “Artificial Intelligence”. Alan Turing, a British polymath was who discovered the mathematical possibilities of the new “Artificial Intelligence”. The proof of this concept was started through Allen Newell, Cliff Shaw, and Herbert Simon’s, “Logic Theorist”. This is essentially a program made to mimic the problem-solving skills of humans. This program is also considered to be the first AI program by many.

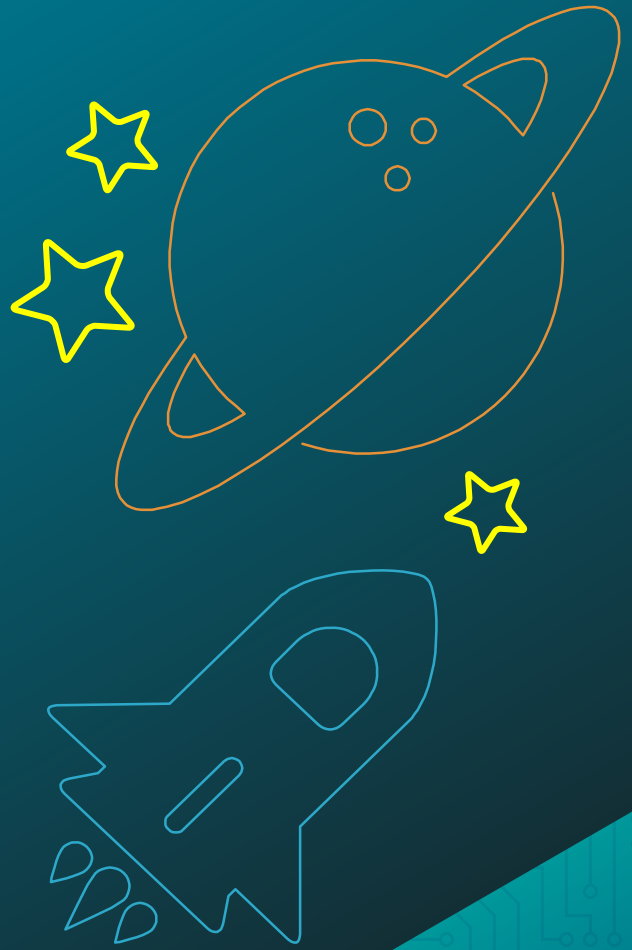

Sophia was a world-famous AI robot citizen built by David Hanson



John McCarthy, the first person to name it the term “Artificial Intelligence”.

# How Your Involvement in Competitive Robotics is Preparing you for this Field.

Some of the concepts we learn in competitive robotics will be essential in this career. The dominant skills needed in being an AI engineer include coding and having well-developed critical thinking skills. Robotics prepares us for that by testing these skills while writing in engineering notebooks and constructing robots. Most importantly, building AI machines are almost just like building robots.



“Artificial intelligence is the future and the future is here.” ~Dave Waters

# THANK YOU!

-TEAM 3383E

WE APPRECIATE YOU FOR TAKING THE TIME TO VIEW OUR CAREER!

# CREDITS

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1. **Uber and Lyft AI by Medium / Wikipedia**
2. **Artificial intelligence facts for kids**

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John McCarthy
Sophia The Robot
Graph of AI growing
Future of AI