

# Key Artificial Intelligence Trends for 2017

By Janet Wagner

The popularity and use of artificial intelligence (AI) has been rising rapidly in recent years, so much so, that AI has gone mainstream. The field of AI is booming largely due to major technology companies such as Amazon, Baidu, Facebook, Google, and Microsoft. These are just some of the technology companies that are weaving AI into many of their products and services.

AI is becoming more prevalent in the everyday life of consumers; AI is on smartphones automatically tagging and organizing photos and powering the voice-activated intelligent. AI is on websites and applications powering chatbots that help consumers find products and answer customer questions. AI is in connected cars enabling voice-activated control of the entertainment system.

Major technology companies such as Facebook, Google, Microsoft, and Baidu have open sourced AI technologies allowing a greater number of SMBs and enterprises to apply AI to business applications and processes. Leading AI researchers hope that AI will allow companies to create amazing, intelligent applications and even transform entire industries. Andrew Ng, VP and chief scientist of Baidu, recently said during an *Inc* [interview](#) that:

“I think that AI in its current form, just supervised learning, is enough for us to transform multiple industries. This is why we say 'AI is the new electricity.' Just like electricity 100 years ago, we've just as through supervised learning; we think we already know how to transform multiple industries, but there might be even more technical breakthroughs that will let us do even more in the future.”

There are many key AI trends to look for in 2017, here are just a few.

## Language Learning and Understanding

Language learning and understanding will most likely be a major trend in 2017. Major technology companies such as Google, Microsoft, and Baidu have been developing language learning and understanding technologies for quite some time.

*The New York Times* recently published an [article](#) that provides details about how Google converted its Google Translate product, which was first introduced in 2006, to an AI-based system. Google has declared on several occasions that it has become an “AI-first” company. The Google Translate Project is just one of many language learning and understanding technology projects at Google.

Microsoft uses AI-powered language learning and understanding technologies to power many of the company's products and services such as Microsoft Cognitive Services speech and language APIs. Microsoft recently [announced](#) that it has reached “parity with humans in speech recognition” and that the company has made significant breakthroughs with Skype Translator.

Baidu is doing a lot of work on language learning and understanding as well as speech recognition. The company is developing a number of conversational applications such as chatbots and voice-activated

intelligent assistants. Andrew Ng told [Inc](#) that the company discovered that AI works across languages and that they didn't need to do much to adapt their English language engine for other languages.

## Conversational Applications

Conversational applications, especially chatbots, got a lot of buzz in 2016; however, many AI experts think that 2017 may turn out to be the year that conversational applications really take off. Chatbots, voice-activated intelligent assistants, and voice-activated web search are just a few examples of AI-powered conversational applications. Companies such as Amazon, Google, and Microsoft are just some of the companies developing AI-powered applications that can engage in intelligent conversations with humans.

There have been some amazing breakthroughs in conversational applications largely thanks to AI. Mitsuku, one of the most popular chatbots running on the Pandorabots platform, [recently won](#) the Loebner Prize for most human-like AI.

This past September, Google acquired API.AI an AI-powered voice-activated intelligent assistant platform. A few months ago, Amazon launched Amazon Lex, the AI technology that powers Amazon's voice-activated intelligent assistant named Alexa. Last month, Microsoft launched Zo, a new social chatbot that can be used on the Kik Messenger application.

Harry Shum, executive VP of Microsoft's AI and Research group, stated in the [announcement post](#) that "We're really moving from a world where we have to understand computers to a world where they will understand us and our intent, from machine-centric to human-centric, from perceptive to cognitive, and from rational to emotional."

## AI-Powered HealthTech

Numerous healthcare-focused technology startups have launched within the past few years, and these companies are applying AI to computer vision, machine learning, and other advanced technologies to help transform the healthcare industry and improve patient outcomes. AI-powered HealthTech is likely to be a key trend in 2017.

A recent Facebook Research [blog post](#) says that "AI is going to bring major shifts in society through developments in self-driving cars, medical image analysis, better medical diagnosis, and personalized medicine. And it will also be the backbone of many of the most innovative apps and services of tomorrow. But for many, it remains mysterious."

Baidu recently launched an AI-powered conversational bot for physicians and patients called Melody. Baidu aims to provide patients with an online medical chatbot that engages with patients in a manner that's as close to a human conversation as possible and will help patients get answers to their health-related questions faster.

According to the company [announcement](#), Andrew Ng says that “As Melody has more conversations, it will also learn and keep getting better. This is just the start of a much larger, AI-driven transformation of the healthcare industry.”

## **Intelligent Things**

According to [Gartner](#), one of the top 10 technology trends for 2017 is intelligent things which include things such as robots, smart appliances, and autonomous vehicles.

The intelligent things trend was on full display at [CES 2017](#) last week. About 500 auto-tech companies showcased autonomous vehicles and related products such as car-computing platforms, sensors, and chips. CES 2017 saw a wide range of smart appliances such as smart refrigerators with voice-activated controls and autonomous vacuum cleaners. CES 2017 wasn't short of cute, intelligent robots. LG Electronics, Leka, and Mayfield Robotics are just a few of the companies that showcased cute, intelligent robots at the show.

## **Exciting Times Ahead...**

Thanks to advances in AI, companies are building intelligent applications that are improving people lives, streamlining business processes, and will very likely transform entire industries. This is an exciting time for AI researchers and companies developing AI-powered products and services, and it looks like 2017 will be an even greater year for AI.