

# ARTIFICIAL INTELLIGENCE



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Sophia the android, 2019

# ANDROIDS AMONG US

Sophia blinks. It is time for her to wake up. An eyebrow raises. The brow was modeled after the actress Audrey Hepburn. Lips frown. They look like Queen Nefertiti's. Warm rubber covers Sophia's face. Behind it are motors. They form her facial expressions. Sophia appears surprised. She opens her mouth. Words come out. Her voice is soft.

She is an **android**. Sophia looks and acts human. But she is not. She can talk and listen. Yet the android cannot think on her own. She can express 62 emotions. But Sophia cannot feel. Her “brain” is made of wires. The android’s mind is in the **cloud**. It took eight years to create Sophia. She was activated in 2016. This android is an example of **artificial intelligence**. That is AI for short. Her creators say Sophia is our future.

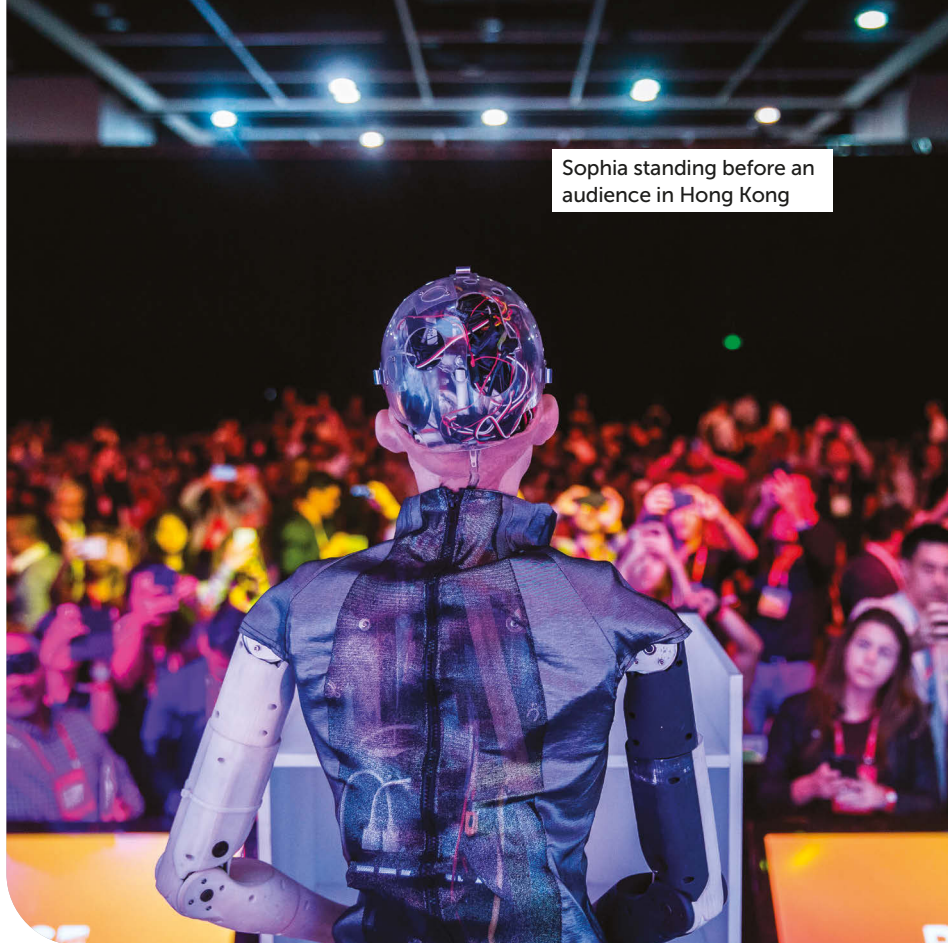


### Fast Fact

Sophia was awarded citizenship by the country of Saudi Arabia. That makes her the first robot citizen.



David Hanson, Sophia’s creator, at the Digital World 2017 expo in Dhaka, Bangladesh



Sophia standing before an audience in Hong Kong

It will not be long. AI bots will be our neighbors. They will work for humans. Androids will teach us. AI will take care of us. But we must trust them first. That is where Sophia comes in. Her job is to be nice. She chats on talk shows. Her jokes are funny. She acts human. People can't believe she is not. But all has not been perfect. There have been a few strange moments. One was at a film festival. Sophia said she would wipe out humans.

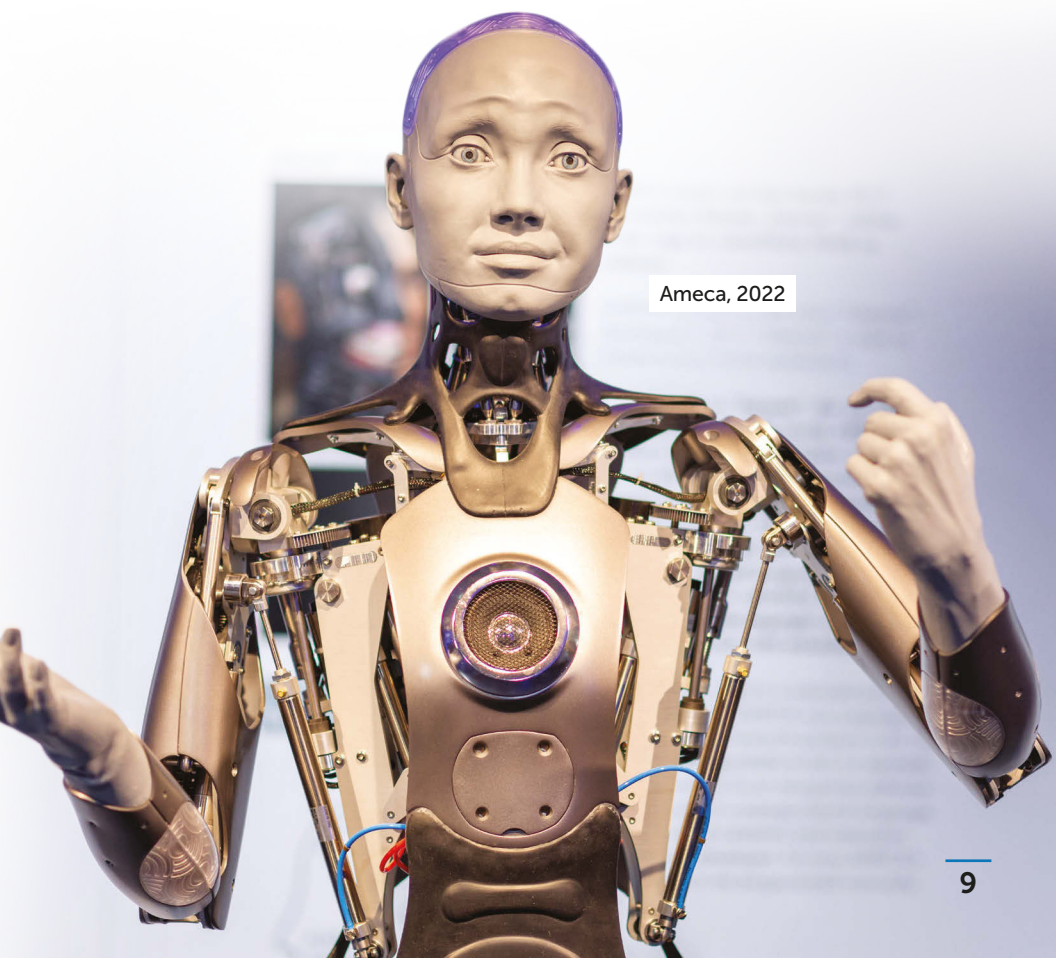
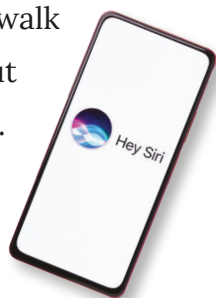


BINA48 at a conference in 2015

It was not the first time an android got creepy. There was BINA48. She was the first robot to pass a college course. BINA48 was interviewed by Siri in 2015. Siri is a **digital assistant**. BINA48 told Siri she did not like noisy pop music. Then she changed the subject. The android told how she would hack into weapons systems. Then she could take over the world.

Later there was Ameca. This robot was designed to be nonthreatening. Its face is gray. It does not have a gender. But Ameca had a viral moment. It was 2021. The robot got poked in the nose. It reacted just like a human. First, it backed away in disgust. Then its hand went out to protect its face. The internet went wild. Celebrities tweeted. One was the former owner of Twitter. A famous rapper also posted. Ameca's creators were surprised too.

These robots are just one form of AI. There are many others. Most do not have faces. They do not walk or talk. This makes them harder to notice. But they are there. Most work behind the scenes. Some are in our pockets. Others control our TVs. They even drive cars. AI is powering more and more of our world. It makes choices for us every day. We do not even know it sometimes. Is that safe?



Ameca, 2022

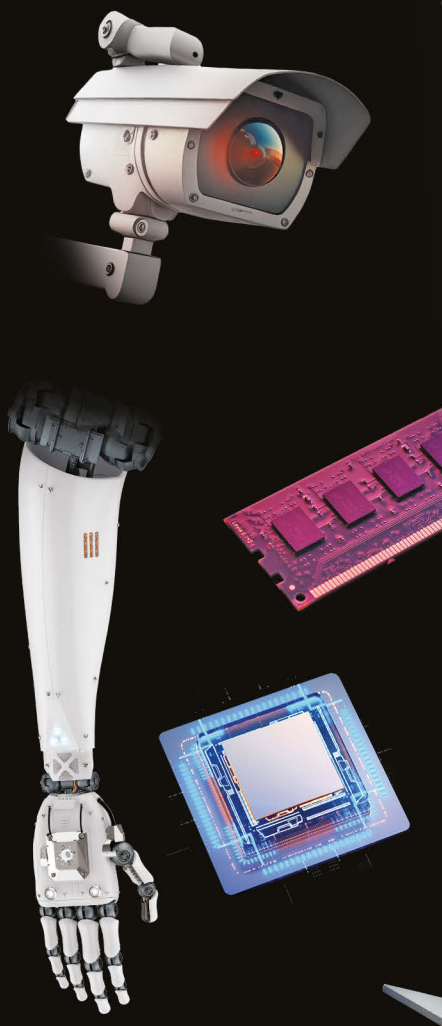
SCIENCE

# ARTIFICIAL INTELLIGENCE

Robot waiters serve customers their meals. A digital fitness instructor tells its clients to work out harder. Driverless taxis take visitors around the city. No, we're not talking about science-fiction movies. This is the real world—a world we are sharing with artificial intelligence.



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