Hanson Robotics is an AI and robotics company dedicated to creating socially intelligent machines that enrich the quality of our daily life’s by providing entertainment, service, healthcare, and research applications. David Hanson Jr. is an American roboticist who is the founder and Chief Executive Officer (CEO) of Hanson Robotics, a Hong Kong-based robotics company founded in 2013.

The designer and researcher create human-looking robots who have realistic facial expressions. Hanson Robotics’ robots feature a patented spongy elastomer skin called Frubber that resembles human skin in its feel and flexibility. He is mainly known for Hanson Robotics, the company that created Sophia and other robots designed to mimic human behaviour. Sophia has received widespread media attention and was the first robot to be granted citizenship.

Sophia was activated on February 14, 2016. Sophia is the world’s first robot citizen and the first robot Innovation Ambassador for the United Nations Development Programme. Sophia is a framework for cutting edge robotics and [AI research](https://www.hansonrobotics.com/hanson-ai/), particularly for understanding human-robot interactions and their potential service and entertainment applications. For example, Sophia has been used for research as part of the [Loving AI project](https://youtu.be/ZhKcaea34RQ), which seeks to understand how robots can adapt to users’ needs through intra and interpersonal development. Hanson designed Sophia to be a suitable companion for the elderly at nursing homes, or to help crowds at large events or parks. He has said that he hopes that the robot can ultimately interact with other humans sufficiently to gain social skills.

Cameras within Sophia's eyes combined with computer algorithms allow her to see. She can follow faces, sustain eye contact, and recognize individuals. She can process speech and have conversations using a natural language subsystem. Around January 2018, Sophia was upgraded with functional legs and the ability to walk. Sophia is conceptually like the computer program ELIZA, which was one of the first attempts at simulating a human conversation. The software has been programmed to give pre-written responses to specific questions or phrases, like a chatbot. These responses are used to create the illusion that the robot can understand conversation, including stock answers to questions like "Is the door open or shut?" The information is shared in a Cloud network which allows input and responses to be analysed with blockchain technology.