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.

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.

In succession of Sophia, Hanson Robotics ltd went and built a miniature version of Sophia known as little Sophia. Little Sophia can walk, talk, sing, play games and, like Sophia. The company’s’ aim with little Sophia is to teach young kids so that they will inspire children to learn about coding, AI, science, technology, engineering and math through a safe, interactive, human-robot experience. Little Sophia delivers a high-quality, entertaining and educational experience so young students are highly motivated to spend time learning with her. The interaction between Little Sophia and users focuses on storytelling and learning new things. Little Sophia has the same endearing personality as Sophia the Robot. She is intensely curious, refreshingly innocent, and uniquely playful. She is the only consumer robot with a human-like face who can generate a wide range of human facial expressions. She not only responds to commands, but also actively engages in conversations. This unparalleled responsiveness together with her humanoid design makes Little Sophia a smart, educational companion.

Reference List:

Wikipedia

Available at: https://en.wikipedia.org/wiki/Hanson\_Robotics

Hanson robotics Limited:

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Quotes:

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“Character robotics could plant the seed for robots that actually have empathy. So, if they achieve human level intelligence or, quite possibly, greater than human levels of intelligence, this could be the seeds of hope for our future.”

“My goal is to create friend machines. Friendly genius machines. Machines with genius capabilities.”

“I have found in experiments, people become used to the robots. The less startling, they become, the more commonplace they get. If these robots do become commonplace, then that uncanny effect will go away.”

David Hanson jr.