SOPHIA ROBOT

Sophia is a female social humanoid robot developed in 2016 by the Hong Kong–based company Hanson Robotics.[1] Sophia was activated on February 14, 2016,[2] and made her first public appearance in mid-March 2016 at South by Southwest (SXSW) in Austin, Texas, United States.[3] Sophia was marketed as a "social robot" who can mimic social behavior and induce feelings of love in humans.[1][4]

SOPHIA has been covered by media around the globe, and has participated in many high-profile interviews. In October 2017, Sophia was granted Saudi Arabian citizenship, becoming the first robot to receive legal personhood in any country.[5] In November 2017, Sophia was named the United Nations Development Programme's first Innovation Champion, and is the first non-human to be given a United Nations title.[6]

According to founder David Hanson, Sophia's source code is about 70% open source.[7] A paper describing one of Sophia's open-source subsystems, called "Open Arms", was submitted to 36th Conference on Neural Information Processing Systems (NeurIPS 2022).

Sophia was first activated on Valentine's Day,[9] February 14, 2016.[2] The robot, modeled after the Ancient Egyptian Queen Nefertiti,[10] Audrey Hepburn, and its inventor's wife, Amanda Hanson,[1][11] is known for its human-like appearance and behavior compared to previous robotic variants. Sophia imitates human gestures and facial expressions and is able to answer certain questions and to make simple conversation on predefined topics (e.g. the weather).[9]

Hanson has said that he designed Sophia to be a suitable companion for the elderly at nursing homes, to help crowds at large events or parks, or to serve in customer service, therapy, and educational applications[9][12] and that he hopes that the robot can ultimately interact with other humans sufficiently to gain social skills.[13]

On October 11, 2017, Sophia was introduced to the United Nations with a brief conversation with the Deputy Secretary-General of the United Nations, Amina J. Mohammed.[14]

On October 25, when Sophia was scheduled to appear at the Future Investment Summit in Riyadh, the Saudi Ministry for Culture and Information issued a press release on the Saudi Center for International Communication website, announcing that Saudi Arabia was granting citizenship to Sophia.[15] At the Summit, the host interviewing Sophia announced that "We just learned, Sophia – I hope you are listening to me – you have been awarded what is going to be the first Saudi citizenship for a robot",[16] making Sophia the first robot to receive legal personhood in any country.[5] In an interview, Hanson stated that he had been taken by surprise by this turn of events.[10]

On November 21, 2017, Sophia was named the United Nations Development Programme's first Innovation Champion for Asia and the Pacific.[6] The announcement was made at the Responsible Business Forum in Singapore, an

event hosted by the UNDP in Asia and the Pacific and Global Initiatives. On stage, she was assigned her first task by UNDP Asia Pacific Chief of Policy and Program, Jaco Cilliers.[17]

Social media users have used Sophia's citizenship to criticize Saudi Arabia's human rights record.[18] In December 2017, Sophia's creator David Hanson said in an interview that Sophia would use her citizenship to advocate for women's rights in her new country of citizenship.[10][19][20]

In 2019, Sophia displayed the ability to create drawings, including portraits. The algorithms used to enable Sophia to draw were developed and adapted by Patrick Tresset.[21] In 2021, a self-portrait created by Sophia sold for nearly $700,000 at auction.[22]

Sophia has at least nine robot humanoid "siblings" who were also created by Hanson Robotics.[23] Fellow Hanson robots are Alice, Albert HUBO, BINA48, Han, Jules, Professor Einstein, Philip K. Dick Android, Zeno,[23] and Joey Chaos.[24] In 2019 to 2020, Hanson released "Little Sophia" as a companion that could teach children how to code, including support for Python, Blockly, and Raspberry Pi.[25]