

## Sophie Hackford

Futurist Researcher Speaker

**Data.** As we increasingly live, work and play inside giant robots (factories, warehouses, offices, airports, Alexa-enabled homes), we need to learn to speak 'data': the language of the machines.

Sophie will explore how the world is turning into a computer that is processing information about us all the time. Our data identity (like our face, or our fingerprint) serves as a login, to both physical and digital spaces.

Privacy, personal sovereignty, security, ethics, and technical limitations, are balanced with the opportunities this depth of data provides.

**AI.** Sophie will demystify artificial intelligence; an emerging set of technologies promising to transform our lives, and even give us (digital) immortality.

As the bot economy proliferates, Sophie will explore how personal avatars might empower consumers to autonomously find deals, jobs, diagnoses, or even love. Beyond autonomous avatars, Sophie will also discuss autonomous companies; entirely digital entities selling services or products to us, and to other autonomous companies.

If AI is a system, many of the pieces are still missing, so Sophie will weave in the social, economic and existential possibilities of this overheated technology space.

**Virtual Technologies.** Sophie will discuss the increasing blend of real and virtual, using examples from computer games like Pokemon Go. She will take us from fake news to fake worlds. As we digitise more virtual objects and virtual experiences, Sophie will demonstrate we have only taken our first steps in the 3D internet.

**Private Space Industry.** What can we learn for Earth, from those innovating in space? In the past decade a whole new industry – and economy – has emerged in off-Earth. Sophie will describe how manufacturing and mining in space, medical research in space, travel to/from space, satellites in space, data centres in space, even terraforming far-off planets, will change our lives here on Earth.

**Quantum Computing.** Without a new compute architecture, our AI dreams might remain firmly in the future. As 'quantum supremacy' nears, quantum machines offer not just enhanced power, but the ability to ask machines new questions we couldn't ask before. Quantum technologies represent a new industry, where overnight, current systems could break (like encryption, communication). New opportunities will emerge, but only if you are 'quantum ready'.

**Man and Machine.** Where do we end and the robots begin? How comfortable are we with synthetic friends? How - and where? - to tax the robots? Sophie will explore the uneasy ambivalence we feel about these machines, as we flip haphazardly between compassion and fear. She illustrates these big questions with wonderfully creative projects by artists and hackers designed to provoke our thinking.

**Physical Internet.** Autonomous vehicles, delivery drones, Hyperloop, 'gigafactories' - when all plugged together these can be thought of as a 'physical internet', a platform that sends humans, goods, vehicles around the world seamlessly, similar to the way the internet transmits data. Sophie will explore a seamless transport future where rockets and robots collaborate.

**Demography and Robotics.** Sophie will explore how technology and demography are converging, precipitating huge spending on robotics by economies like China, Japan, Korea. Not just for elder care and neuro-enhancement needs, robots might also be needed to fill jobs that are left unfilled by plummeting birth rates.

**Internet of Living Things.** Sophie will explore how we might soon use genetic information to make important business decisions far beyond healthcare, from security to supply chain management to food safety. She'll show how we are on the brink of a genomics explosion, changing the way we make decisions, and personalise our healthcare and lifestyle behaviours.