

TALK DESCRIPTIONS

Friday, Nov 22

What do you mean, 'we', Homo sapiens? - Anders Sandberg

When taking a long-term perspective of the future it is often argued that since there are astronomically many future generations the total future value at stake is enormous, and this should motivate us to reduce existential risk and to pursue certain technologies. But if we seriously consider the effect of long-term timescales they also imply that future culture and people may become very alien. Indeed, even if earth-originating intelligence goes on to have a vast future there might only be recognizably human values for a relatively brief time. How should we reason about "our" future when future beings might be very alien from us? Is descent enough for us to embrace our posthuman grandchildren no matter what they are?

What Are Existential Risks and Why Should You Care? - Phil Torres

Existential risks are catastrophes that would either destroy civilization or bring about human extinction. Although humanity has been haunted by a handful of existential risks throughout our evolutionary history—supervolcanoes, asteroids, comets—the greatest threats today arise from our own ingenuity. This talk provides an overview of the emerging field of "existential risk studies," which strives to understand the nature of existential risks and devise strategies for avoiding a worst-case outcome. It will also survey several reasons for taking the topic seriously: there is almost certainly no moment in our species' past during which the likelihood of annihilation was higher.

The Six Waves of AI - Hod Lipson

Artificial Intelligence and Robotics technologies have been making grand strides over the past few years, outperforming humans in tasks once thought to be impossible to automate. Machines can now recognize images, interpret audio and understand language with unprecedented reliability. Cars can drive themselves. But where will this technology go next, and how far can it reach?

Abundance in the Digital Age - Peter Diamandis

Peter Diamandis will be giving a talk on his work, book, etc.

"Beyond Buzzwords: Innovation, Inequity, and Imagination in the Digital Age" - Ruha Benjamin

From everyday apps to complex algorithms, technology has the potential to hide, speed, and even deepen discrimination, while appearing neutral and even benevolent when compared to racist practices of a previous era. In this talk, I present the concept of the "New Jim Code" to explore a range of discriminatory designs that encode inequity: by explicitly amplifying racial hierarchies, by ignoring but thereby replicating social divisions, or by aiming to fix racial bias but ultimately doing quite the opposite. This presentation takes us into the world of biased bots, altruistic algorithms, and their many entanglements, and provides conceptual tools to decode tech promises with sociologically informed skepticism.

Saturday, Nov 23

Gene editing humanity – Who decides? - Natalie Kofler

This month marks a year since Dr. He Jiankui announced to the world that he had used CRISPR to modify human embryos in a process known as germline gene editing, resulting in the birth of two little girls who are the first humans to have every cell in their body genetically modified – including their eggs. Their altered genomes could be inherited by their children and grandchildren. Dr. He's experiment was in direct defiance of global scientific consensus that it was just too early to safely and ethically gene edit the human germline. It was also revealed that multiple senior scientists knew of Dr. He's intentions but failed to report him. This presentation will review the ethical and social aspects of human germline gene editing and recap the year that followed Dr. He's shocking announcement. International efforts are currently underway to create responsible research guidelines for human germline editing. I will argue that guidelines are necessary, but not sufficient to ensure safe and ethical use of CRISPR gene editing. Scientific culture must also transform to become more open, diverse and inclusive to ensure ethical use of CRISPR technology. I will propose five recommendations that can help scientific research more effectively and equitably serve society.

Rejuvenation Biotechnology: The Dawn of the Post-Aging World is Only a Matter of Time - Aubrey de Grey

People are living longer - no longer because of reduced child mortality, but because we are postponing the ill-health of old age. But we've seen nothing yet: regenerative medicine and other new medicines will eventually be so comprehensive that people will stay truly youthful however long they live, which means they may mostly live very long indeed. I will discuss both the biology and the sociology of what will be the most momentous advance in the history of civilisation.

Cyborg Universe - Kai Landre

Kai Landre always wanted to be in space; but as he couldn't do so he had to take it to himself. That's the main reason he created The Cosmic Sense, a Cyborg Sense to perceive the universe in his own mind.

How to Become Posthuman - Francesca Ferrando

In this talk, Francesca Ferrando will discuss the macro questions (such as designer babies, super AI and the anthropocene), and micro questions (such as our daily interaction with technology, bio-hacking and consciousness hacking, the evolution of epigenetics, and, more in general, habits of existence) related to the posthuman.

Ethical Concerns for a Spacefaring Civilization - Melinda Soares-Furtado

In my talk, I will discuss four major concerns that our species must tackle at this critical moment in history.

1. Space pollution --- How do we address the safety concerns of an increasingly crowded low-Earth orbit?
2. Space mining --- Should we mitigate the destruction of a pristine alien environment? Will we justly allocate new resources? What legislature is in place and what legislature is lacking on this front?
3. Allocation of power --- What will be the role of governments and large transnational corporations in the potential mining and development of solar system resources? What rights will the potential workers have in these scenarios?
4. The escape hatch fallacy --- While the colonization of space seems inevitable, is this enthusiastic conquest for new worlds a distraction from our perilous condition here on Earth?

Hearing Space with Cyborg Art - A Concert by Kai Landre

Sensing space is a reality; and listening to it as well. Cyborg senses allow us to transform data into art; and Kai Landre will allow you to hear the live music of Cosmic Rays.

Sunday, Nov 24

How Turing Put Us Into a Simulation - Michele Reilly

Google's recent achievement of quantum supremacy has established that we aren't in a simulation after all. We're in something much more interesting: a wave-function.

Popularly called Many Worlds, but actually more properly thought of as 'Many Minds', 'Many Stories', or, 'many specific pieces of data which can only be copied and erased from other specific perspectives'.

Physics and Artificial General Intelligence are seemingly not compatible. The Universe is not a piece of data, as something is only data from an external perspective. It consists of qubits, rather than bits, it can hand us computational results that we would not be able to achieve through the manipulation of data. We generally experience those results as the properties of matter.

Artificial Intelligence: Will It Go to Your Head Someday? - Susan Schneider

It's 2040, and you stroll into the Center for Mind Design where you can buy a variety of brain enhancements. How far do you want to go? The Human Calculator promises to give you savant-level mathematical abilities. Zen Garden can make you calmer and more efficient. Or you can buy "Merge," a series of enhancements that allow you to gradually augment and transfer mental functions to the cloud.

This may all sound like science fiction, but Susan Schneider, a cognitive scientist and philosopher at the University of Connecticut and the NASA/Blumberg Chair of Astrobiology at the Library of Congress, says brain microchips and other techniques to integrate humans with artificial intelligence are under development. AI, she says, is revolutionizing the economy, and will inevitably go inside the head as corporations attempt to allow us seamless access to our devices.

Schneider addresses the implications of AI in our lives, and how to ensure the science develops in a way that promotes human flourishing. Vouchers for her book *Artificial You: AI and the Future of Your Mind* (Princeton University Press), is available.