

OUTLINE

Acadia Senior College
FALL 2014 ARTIFICIAL INTELLIGENCE (AI) AND ROBOTS
Teachers: Ron Beard, Gray Cox, Ed Snyder

Session 1

Getting Acquainted: Respond to two questions circulated in advance:

1. Why did you sign up for this course; what are you hoping to get out of it?
2. Name one positive or negative experience you have had with AI or robots.

Discuss Definitions (circulated at this point) on

Artificial Intelligence, Simple; General; Super/Technological Singularity
Robots/Drones
Friendly AI
Wisdom
Precautionary principle
Nanotechnology

Before or after Definitions show Gray's 15 minute video on AI and Values

At end of session (or earlier if time permits) circulate the folder with many examples of how AI and robots are already a major part of our lives. Ask each participant to take an item and report on it to the group.

Distribute for next session a 7 page reprint from Kurzweil on Singularity and read Barrat: Introduction and chapters 1, 2, 10, and 16

Session 2

What will be the impact of AI within the lifetime of our grandchildren, i.e. the next 50 years?

Discuss reactions to Kurzweil and Barrat and items in folder if not discussed in Session 1.

At end of session ask for volunteers to read certain items or explore Internet sites and report at next session

Books:

Martin Ford, *The Lights in the Tunnel* (2009);

Michio Kaku, *Physics of the Future, How Science will Shape Human Destiny and our Daily Lives by the year 2100* (2011)

Michio Kaku, *The Future of the Mind* (2014) esp Concluding remarks p. 317 et seq

Singer and Friedman, *Cybersecurity and Cyberwar* (2014)

Robert Geraki, *Apocalyptic AI—Vision of Heaven in Robotics, Artificial Intelligence and*

Robots, (2012)
Frank, Roehrig, Pring, *Code Halos, How the Digital Lives of People, Things and Organizations are Changing the Rules of Business* (2014)

Fiction-- Daniel Suarez, *Daemon* a novel; Jules Verne, Isaac Asimov, etc

Films—2001, Close Encounters of a Third Kind, Gravity, HER

Internet Sites: Singularity-- Hub and University; World Future Society; Global Foresight Network, GFIS, Millennium Project; various words in Wikipedia, e.g. precautionary principle,

Session 3

Discuss various books and Internet sites.

Reports by people who took reading assignments in Session 2

(This might be a good spot to have comments from a COA, Jax or MDIBL expert)

At end of session distribute Gray's draft legislation on an Artificial Intelligence Impact Statement

Session 4

Discuss Gray's proposal

and any unfinished business from Sessions 2 and 3

Near the end of this session, discuss whether there is agreement or disagreement with this statement:

“We cannot know for certain whether AI and robots of the future will be an unmitigated blessing or a disaster. Only future events will tell. But the dangers are so great that the precautionary principle should be applied.

“What we can be sure of is that the increasing use of AI and robots will cause major changes in our economic and social life, due to loss of jobs, hollowing out of the middle class, growing gap between the few “haves” (the 1%) and the many “have nots” (the 99%).

“Among the many radical changes that may be required are new standards/indicia for progress

in our culture that emphasize quality of life and well being over income in a market economy.”

At end of session handout Mother Jones article *Terminated*;
Meyerson article in Wash Post, 3/26/14, *The coming job apocalypse*
Refer to Brynjolfsson & McAfee *Race Against the Machine* 2011

Session 5

Defining a Good Society. If AI and Robots are bringing massive changes and benefits to our economic and social culture, what kind of good society should we be working toward?

Goals FDR Four Freedoms in WWII, Universal Declaration of Human Rights and associated Covenants

Discussion Of GDP (Gross Domestic Product) standard and alternatives e.g. Prosperity Index
See list in Wikipedia

Participant exercise: What is most important in your life? Family, work, hobbies, exercise??
Read obits--see what is most important to most people

Handouts: *NASA-funded study: industrial civilisation headed for 'irreversible collapse'?*;
The Impossibility of Growth Demands a New Economic System, George Monbiot

Session 6

Impact of AI on our economic systems. Martin Ford book

Discuss “no growth”, “steady state” “new economy”

Guaranteed Income for Everyone Michael Howard, Umaine BDN op-ed 3/5/14

Final half hour ask for overall reactions, conclusions AI—promise or peril? And to the course-- what should we have done differently?

Circulate ASC evaluation form