

Impact of AI and Internet of Things on Society, Politics and the Economy

This course uses non-technical terms to explain various AI and the Internet of Things (IoT) technologies (AIoT) and then discusses the impact of AIoT applications on society, politics, and the economy.

We are facing an era of tremendous changes, where our past thinking can no longer keep up. The only constant is that the speed of profound changes in thinking will only get faster. These accelerated changes are influenced by the human capability (AIoT) to process data. Fig. 1 show the human ability of handling data. This ability is significantly affected by the development of IC technology (see Fig. 2). Fig. 1 shows the human ability to handle data. This ability is significantly affected by the development of IC technology (see Fig. 2).

Prefix		Base 10	Decimal	Adoption [nb 1]
Name	Symbol			
quetta	Q	10^{30}	1 000 000 000 000 000 000 000 000 000 000 000 000 000	2022
ronna	R	10^{27}	1 000 000 000 000 000 000 000 000 000 000 000 000	2022
yotta	Y	10^{24}	1 000 000 000 000 000 000 000 000 000 000 000	1991
zetta	Z	10^{21}	1 000 000 000 000 000 000 000 000 000 000	1991
exa	E	10^{18}	1 000 000 000 000 000 000 000 000	1975
peta	P	10^{15}	1 000 000 000 000 000 000	1975
tera	T	10^{12}	1 000 000 000 000	1960
giga	G	10^9	1 000 000 000	1960
mega	M	10^6	1 000 000	1873
kilo	k	10^3	1 000	1795
hecto	h	10^2	100	1795
deca	da	10^1	10	1795

Fig. 1. Human ability to handle data

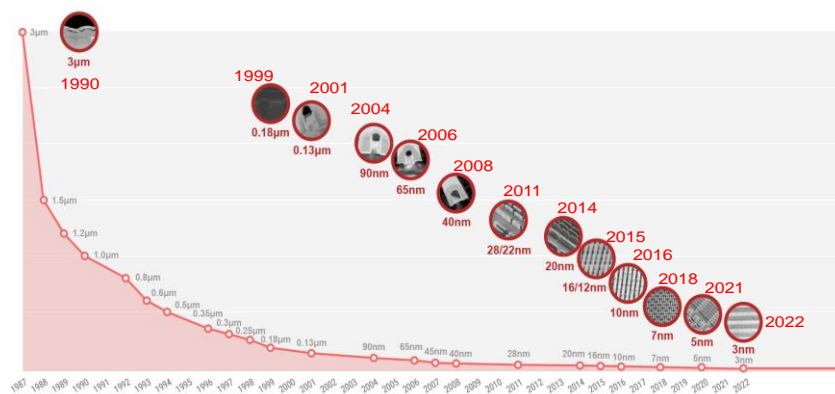


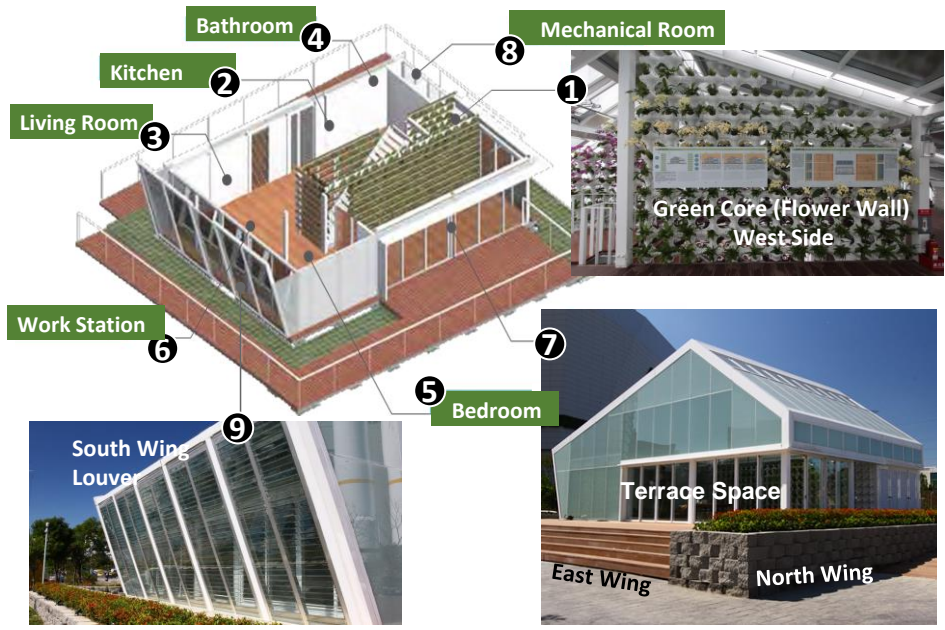
Fig.2. Human ability to handle data affected by IC technology

Based on the above understanding, this course will cover the following topics:

- IoTtalk: An example of the IoT Platform [1]. IoT has revolutionized society by connecting people and devices, while political challenges arise concerning data regulation and privacy. Economically, IoT boosts efficiency and transforms industries.
- Altalk: An example of the AI Platform [2]. AI's impact on society is characterized by transformative technologies that are shaping various aspects of human life, accompanied by ethical dilemmas and concerns about privacy, bias, and automation's impact on jobs.
- AgriTalk: smart agriculture application of Altalk [3][4][5]. Smart agriculture impacts society with sustainable practices, politics through agricultural policies, and the economy by boosting efficiency and yields.

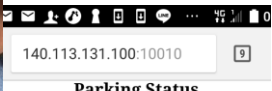


- HouseTalk: smart house applications of IoTtalk [6]. Smart houses impact society by enhancing living standards, influence politics through regulatory frameworks, and drive economic growth in tech industries.



- CampusTalk: smart campus applications of IoTalk [7]. Smart campuses impact society by fostering tech-savvy students, influence politics with educational policies, and contribute to the economy through innovation.

Smart Parking



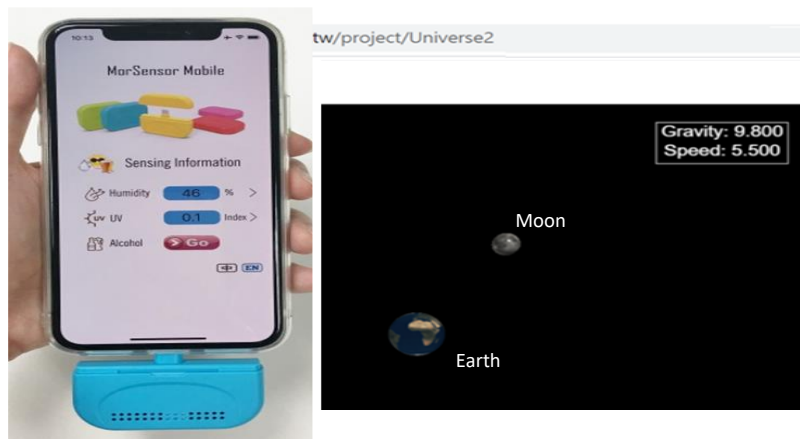
DeviceID	Status	Time
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358878080077784	●	2018-09-05 18:44:05
358878080078022	●	2018-09-06 11:08:49
358878080078147	●	2018-09-10 18:07:40
358878080079301	●	2018-08-31 21:45:54
358878080079582	●	2018-09-11 17:18:36
358878080134619	●	2018-09-06 23:24:54
358878080135954	●	2018-09-11 21:01:14
358878080139196	●	2018-09-06 14:23:37
358878080139279	●	2018-09-11 21:44:24
358878080139295	●	2018-09-11 21:48:32
358878080139386	●	2018-09-11 17:58:01
358878080139428	●	2018-09-07 07:14:24
358878080140178	●	2018-09-06 16:46:03
358878080140574	●	2018-09-07 16:38:55
358878080141978	●	2018-09-08 14:42:40
358878080144980	●	2018-09-10 16:50:24
358878080145037	●	2018-09-06 13:15:33
358878080145052	●	2018-09-02 12:17:25
358878080148072	●	2018-09-11 18:06:48



- ArtTalk: including interactive art applications (CATtalk [8]), smart picture frame (FrameTalk [9]), remote puppet performance (PuppetTalk[10]).



- EduTalk: smart education based on IoTtalk [11].



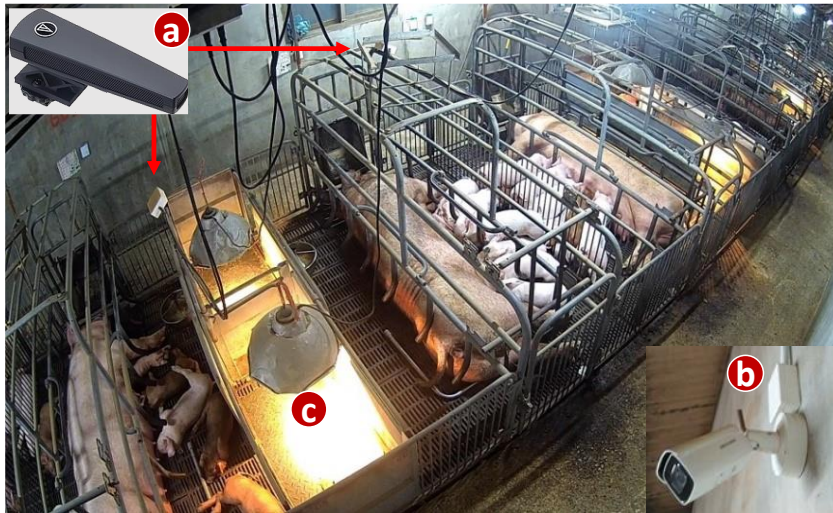
- VoiceTalk: smart voice application based on Altalk [12].



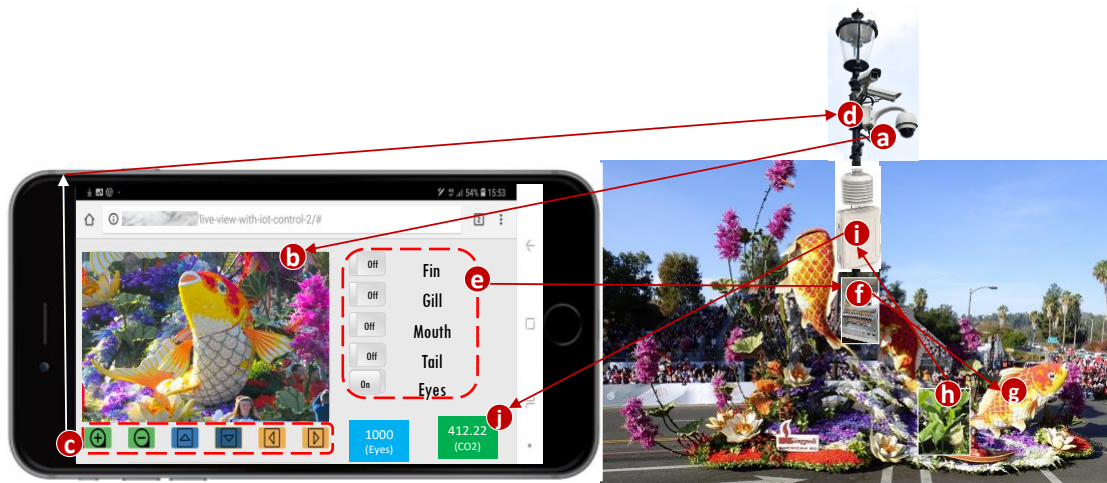
- AMBtalk: smart hospital applications based on Altalk [13].



- AnimalTalk: including BatTalk [14], PigTalk [15] and FishTalk [16].



- ParadeTalk [17]: describes an IoT based system that allows innovative interactions between parade floats and audiences. We implement ParadeTalk in the Singpoli parade float of the Pasadena Tournament of Roses in California, USA.



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