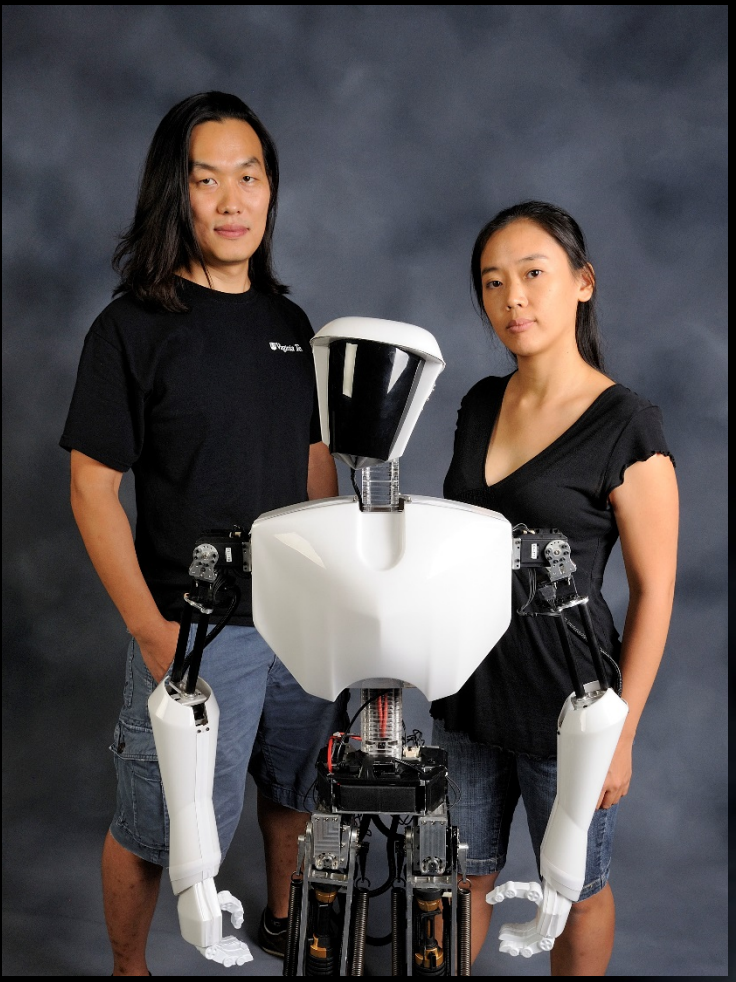
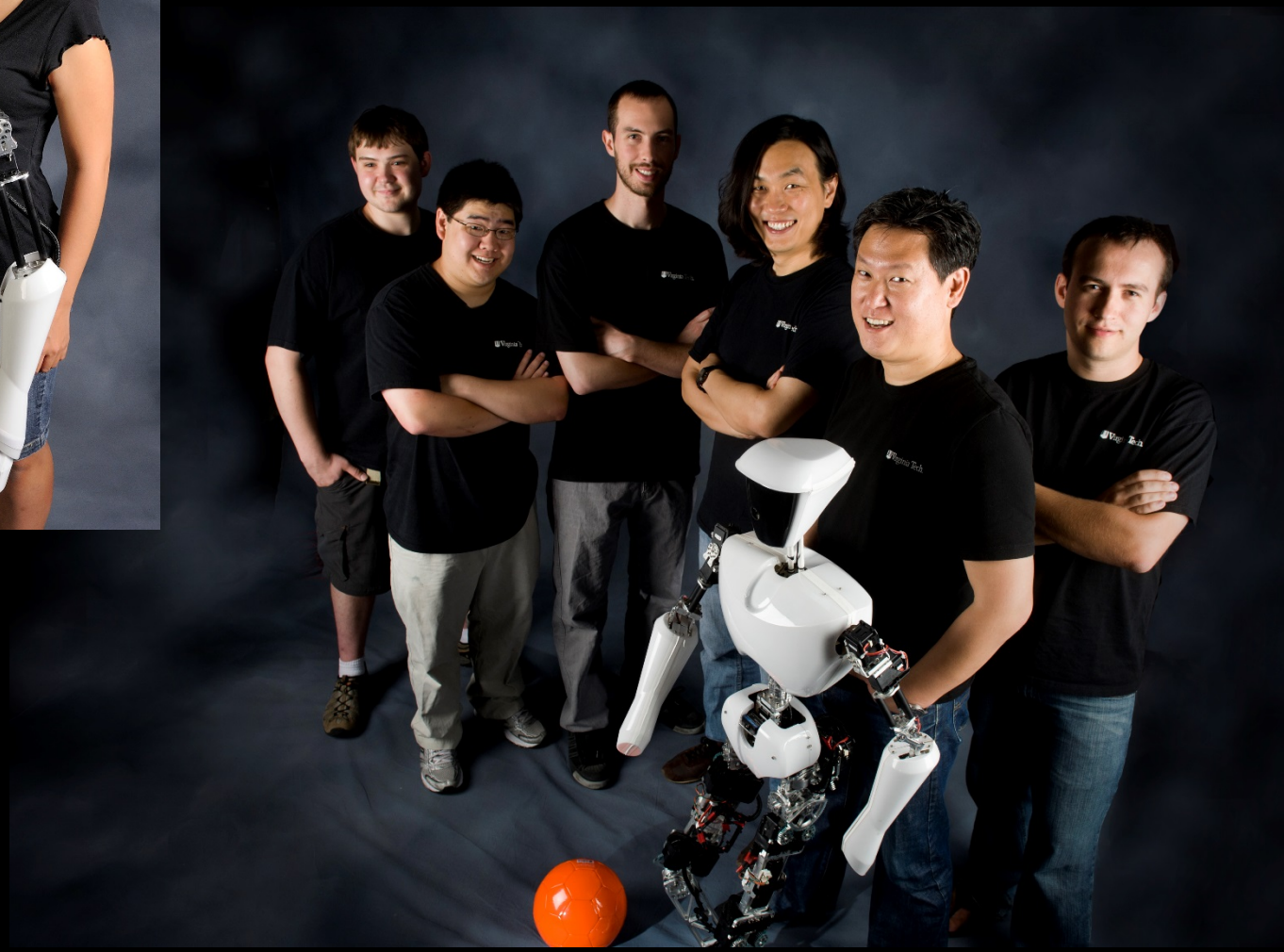
로봇과 미래
그리고 우리사회

한재권

로봇 찰리(CHARLI) 개발





로보컵 2011 년 대회 우승

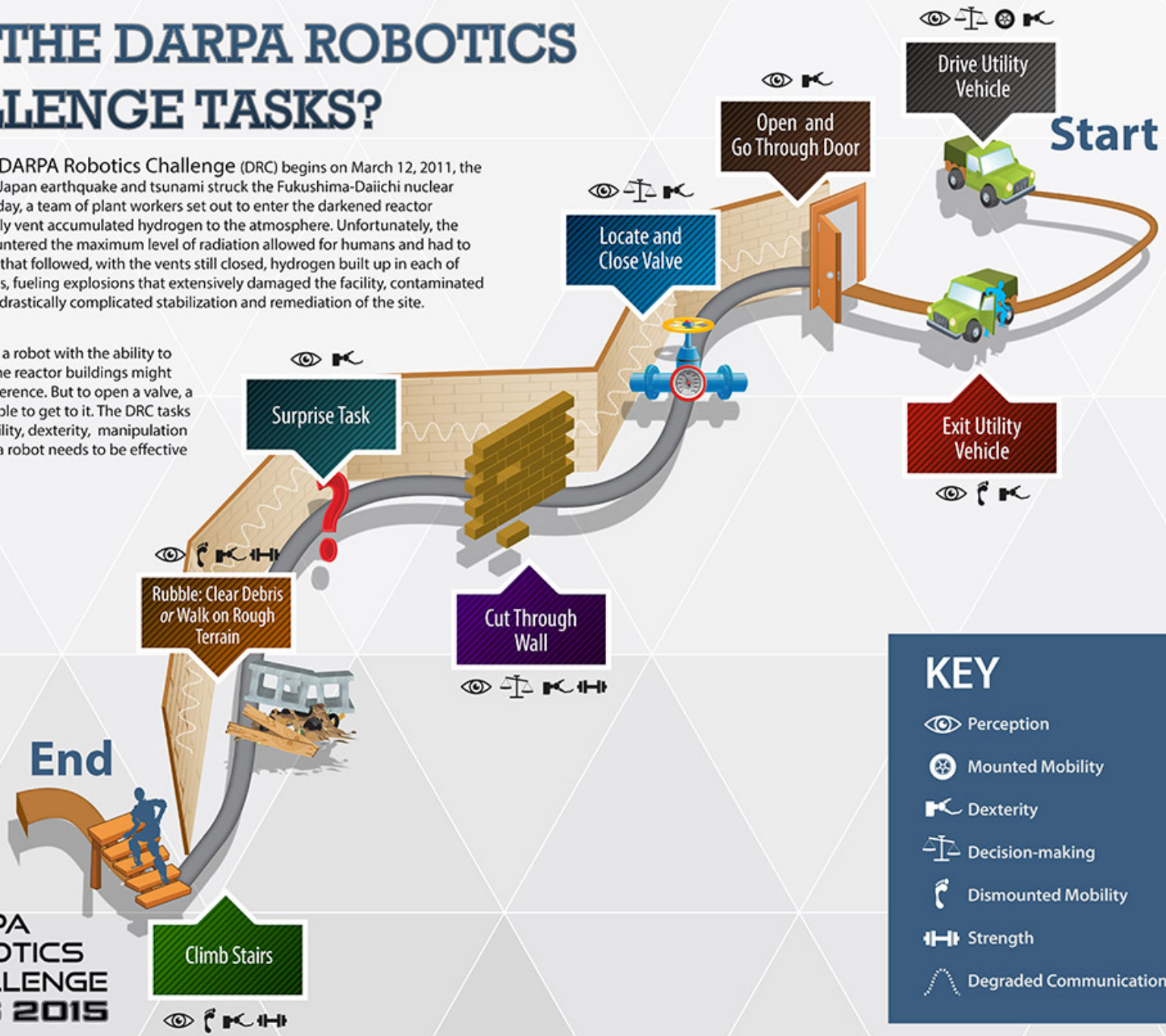
로봇 똘망(THORMANG) 개발

다르파 로보틱스 챌린지 참가

WHY THE DARPA ROBOTICS CHALLENGE TASKS?

The story of the DARPA Robotics Challenge (DRC) begins on March 12, 2011, the day after the Tohoku, Japan earthquake and tsunami struck the Fukushima-Daiichi nuclear power plant. On that day, a team of plant workers set out to enter the darkened reactor buildings and manually vent accumulated hydrogen to the atmosphere. Unfortunately, the vent team soon encountered the maximum level of radiation allowed for humans and had to turn back. In the days that followed, with the vents still closed, hydrogen built up in each of three reactor buildings, fueling explosions that extensively damaged the facility, contaminated the environment and drastically complicated stabilization and remediation of the site.

At Fukushima, having a robot with the ability to open valves to vent the reactor buildings might have made all the difference. But to open a valve, a robot first has to be able to get to it. The DRC tasks test some of the mobility, dexterity, manipulation and perception skills a robot needs to be effective in disaster response.

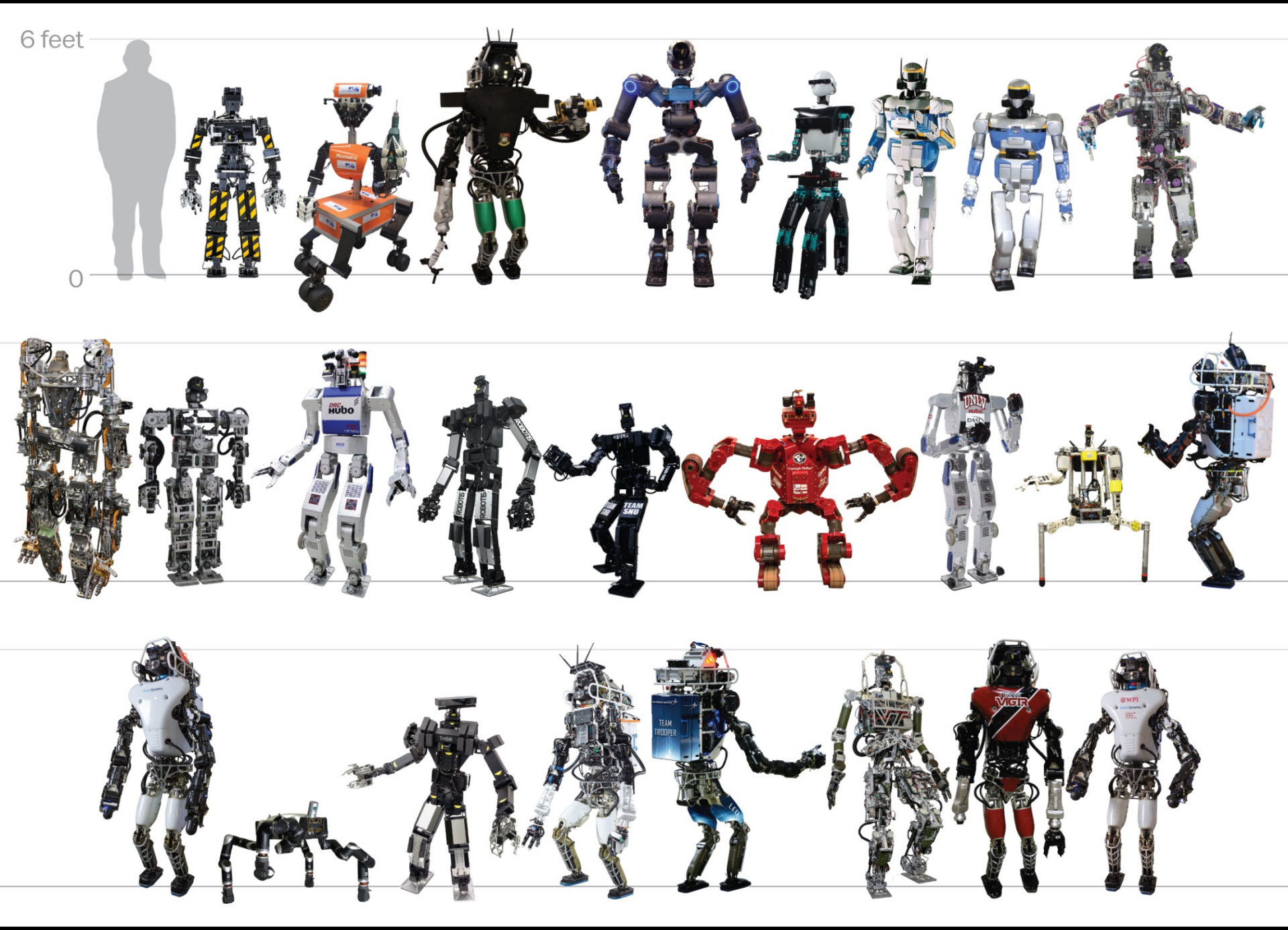


DARPA

DARPA ROBOTICS CHALLENGE FINALS 2015

KEY

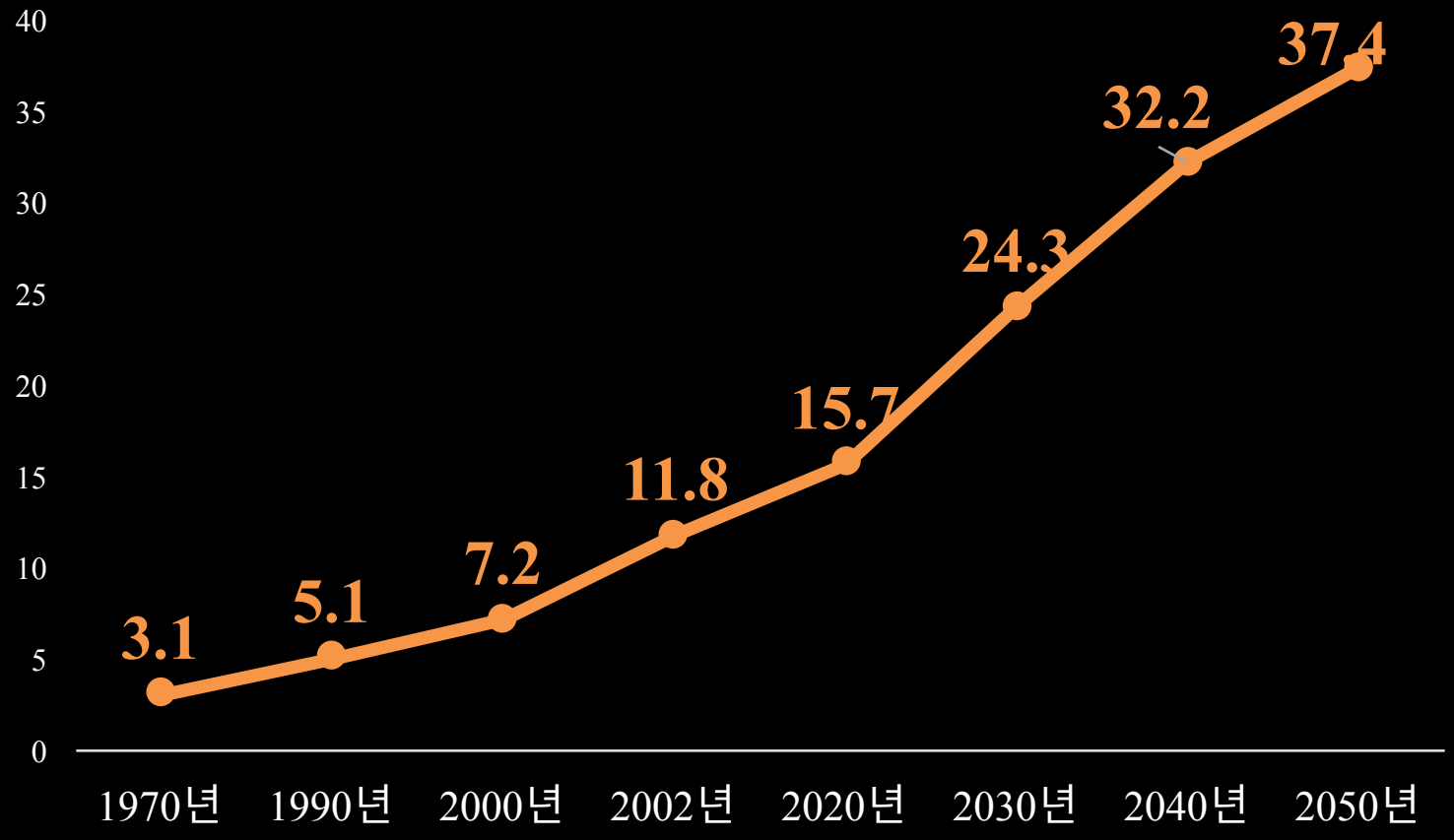
- Perception
- Mounted Mobility
- Dexterity
- Decision-making
- Dismounted Mobility
- Strength
- Degraded Communications


6 feet
0
DRC Hubo
TEAM SNU
TEAM TROOPER
VIGIR
WPI


POLARIS
4
17:45:24 06/06/2015
X8 배속

로봇을 왜 만드나요 ?

고령화 사회의 해답



한국: 2030년, 고령화율 24.3% (통계청)

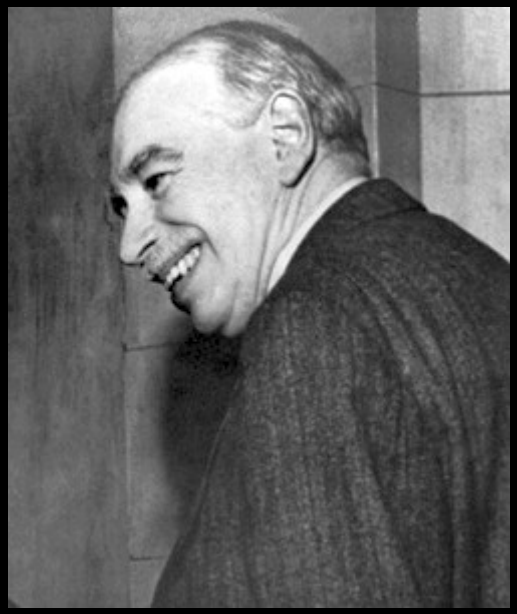
피할 수 없는 실업 문제

로봇과의 경쟁, 협업

과학 기술의 발달의 반작용, 결핍

Robots → Humanity

새로운 경제 체제의 등장



John
Keynes

Friedrich
Hayek

William
Beveridge

쓰임과 균형