

## Opportunities of AI in the Finnish health care system

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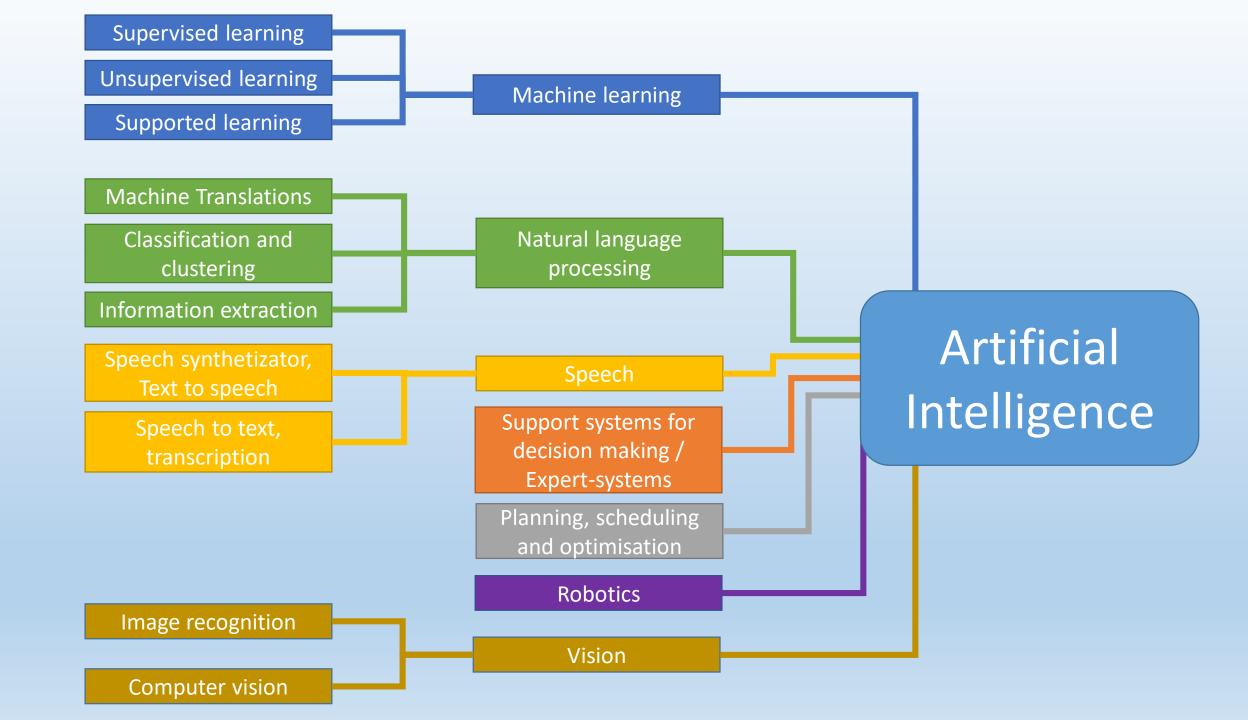
#### Strengths of humans and artificial intelligence

#### **Humans are naturally good at:**

- Common sense
- Rationalization
- Imagination and innovation
- Moral decisions
- Abstraction
- Compassion
- Generalization
- Causality

### Artificial intelligence can augment human abilities at:

- Pattern recognition
- Dealing with massive data
- Repetitive tasks
- Fast objective decisions
- Finding hidden properties in massive data
- Works tirelessly 24/7, fast response time
- Can be scaled up to a global scale
- Correlation



#### Al in health care, from technology to applications and future advancements

The future

# Currently in production and use

Al algorithms

 Neural networks Computer vision and text analytics

Pattern recognition and natural language understanding

- Computer translations
- Al supported imaging and diagnostics

Service robots, chatbots

 Improved user interfaces, control and reporting using natural language

Al supported Radiology, Neurology, Dermatology, Cardiology, Orthopedics, Ophthalmology

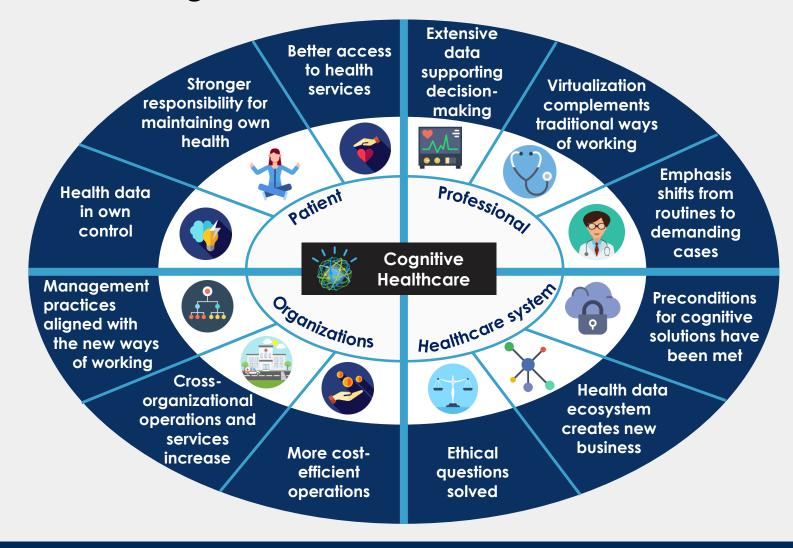
In development and testing Al supported pharmacology, analytics, personalized health care and wellbeing. Personal Al assistant

Innovation, new technologies and augmented abilities



#### **Cognitive Healthcare Vision**

What Does Cognitive Healthcare Look Like in Finland in Five Years?





#### Latest research

- <u>Tekoäly ja terveydenhuolto Suomessa</u> "Al and health care in Finland"
- Kyberturvallisuus sosiaali- ja terveydenhuollossa "Cyber security in social- and health care"
- Interventiot ja tekoäly terveydenhuollossa "Interventions and AI in health care"
- Suomen terveysdata ja sen hyödyntäminen "Finnish health data and its utilization"
- Available for free online at jyx.jyu.fi









#### Thank you!

