

AI and robotics: opportunities, challenges and the future

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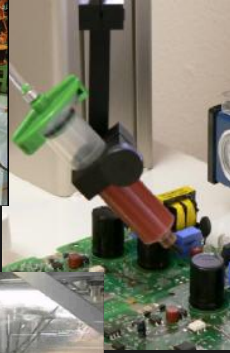


AI

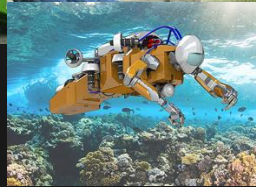
- Science and engineering of computer systems considering both software and hardware
- Applications draw parallel to human capabilities – visual perception, communication, decision making, planning
- AI systems can learn from data (experience) and improve own performance over time
- Multitude of methods: machine learning/deep learning, logical reasoning, expert and rule-based systems, case-based reasoning, ...

Robotics and AI are everywhere

Industry



Outdoor

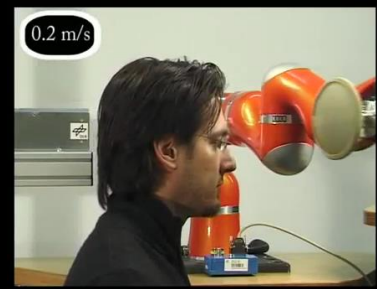


Service



Human robot co-manipulation

KTH CVAP



Trimble and Boston Dynamics Announce Strategic Alliance to Extend the Use of Autonomous Robots



New technology trends



New technology trends



New technology trends

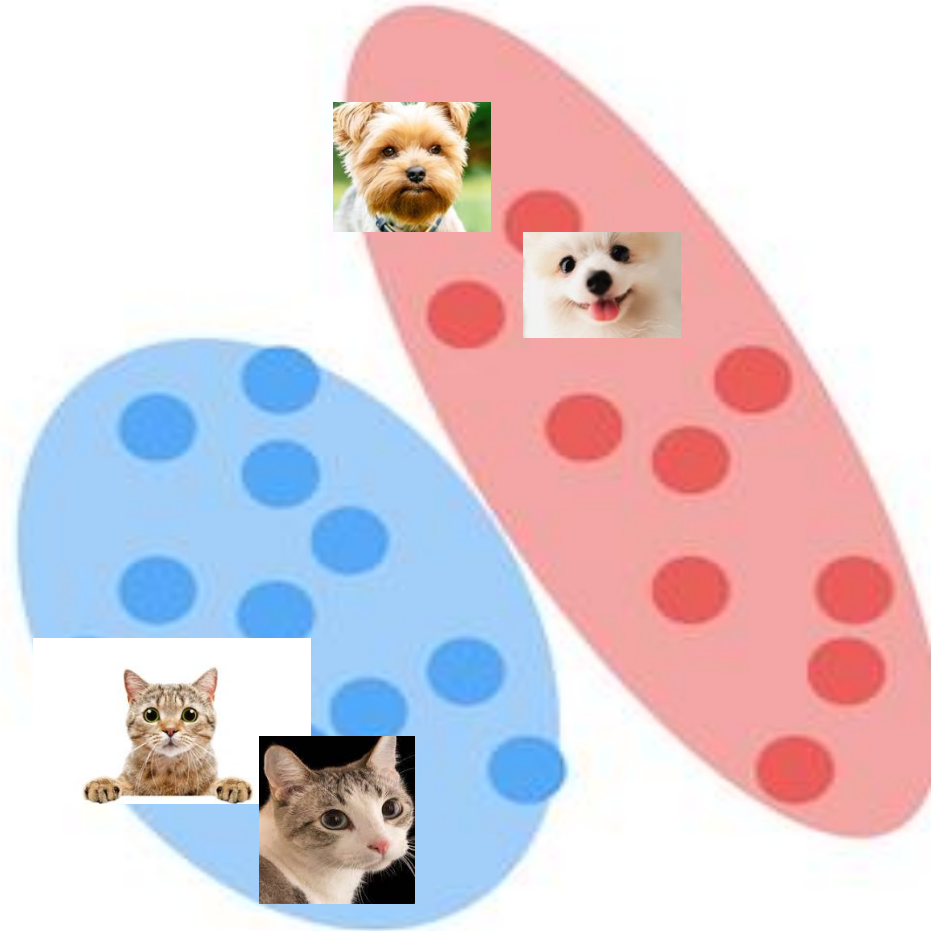
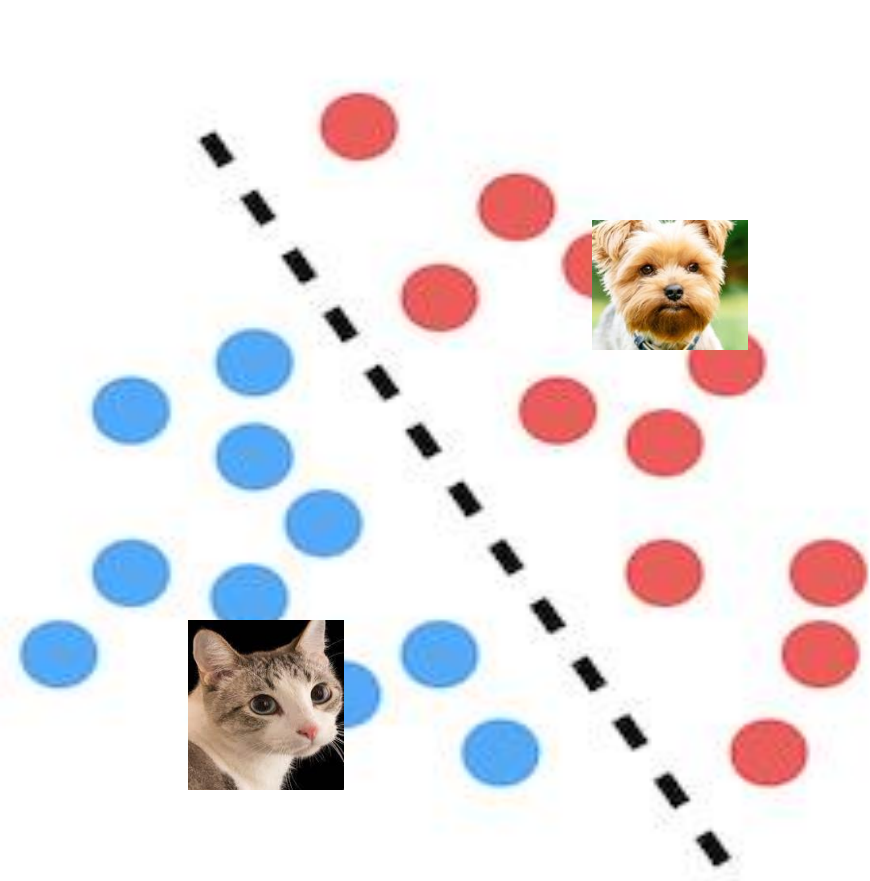


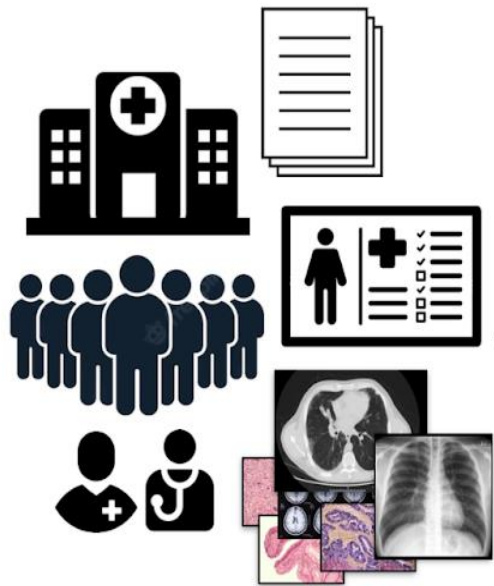
New technology trends



Discriminative

Generative



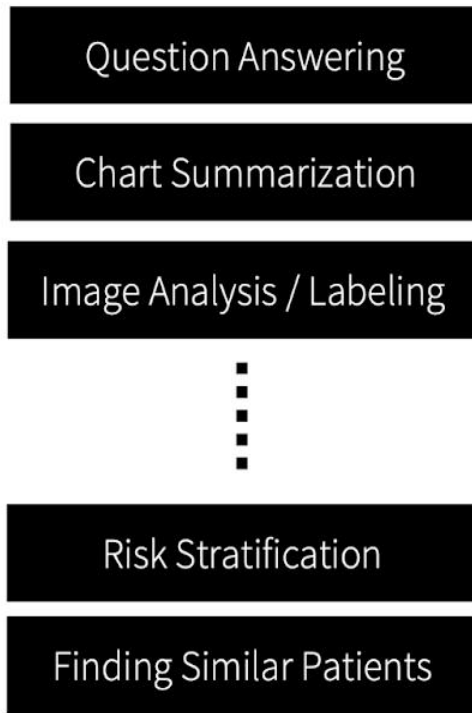


Millions of EHRs



HEALTHCARE DATA

REUSABLE
COMPONENTS

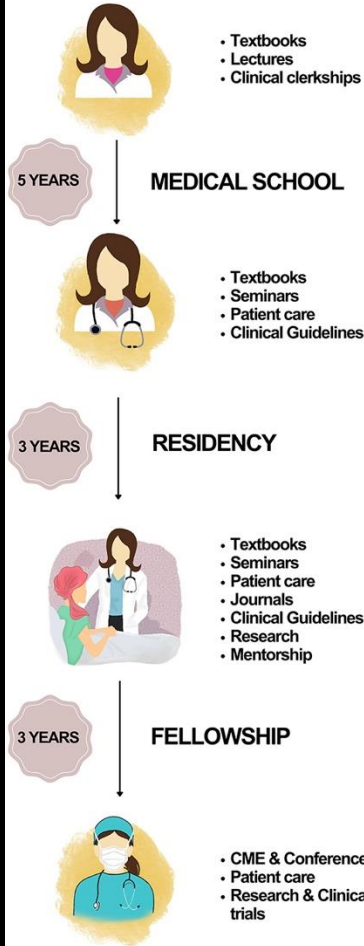


TASK ADAPTATION



HUMAN-AI
COLLABORATION

PHYSICIAN



ARTIFICIAL INTELLIGENCE

