

Research on AI/ML for verticals / new-use cases at Ericsson

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Who are we?



- Maria Edvardsson



- MSc from EE at KTH 1991-1996. Signal processing and digital communication.
- Work at Ericsson Research
 - 3G-6G so far
 - Line manager for last 13 years
 - Now program manager for new research program

- Erik Nordell



- MSc from EE at KTH 1993-1998. Signal processing and digital communication.
- At Ericsson since year 2000 mainly in many roles in product development of the Ericsson radio products
- At Ericsson Research since 2020 as line manager

- Sara Thorson



- MSc International Business at Gothenburg University School of Economics 1996-2000.
- Ericsson Research Consumer & Industry Lab since 2019
 - Use case research
 - Consumer & market insight, XR

Research program on sustainable digitalization of industries and societies



- We engage with ecosystem partners, competitors and universities to gain more knowledge and influence.
- We develop solutions that can serve many new use-cases
- Technology areas of high interest right now
 - eXtended Reality
 - Reliable, available and resilient systems
 - Sensor integrations, sensor fusion, joint communication of sensing, digital twin.



AI in healthcare

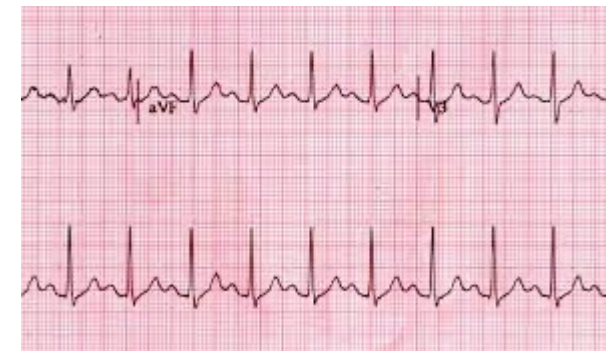
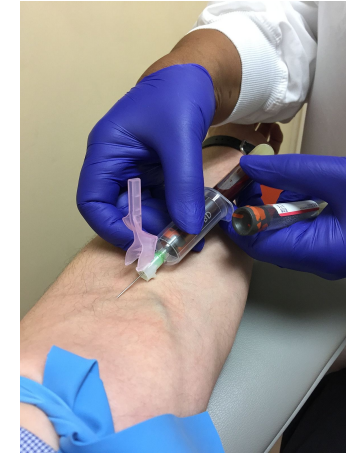
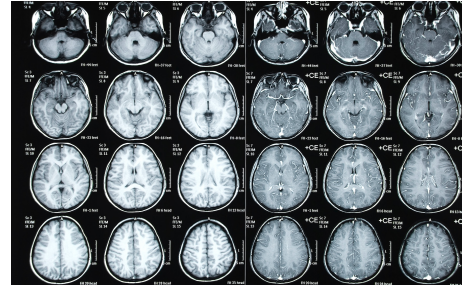


To diagnose a patient is to collect data and from that draw conclusions

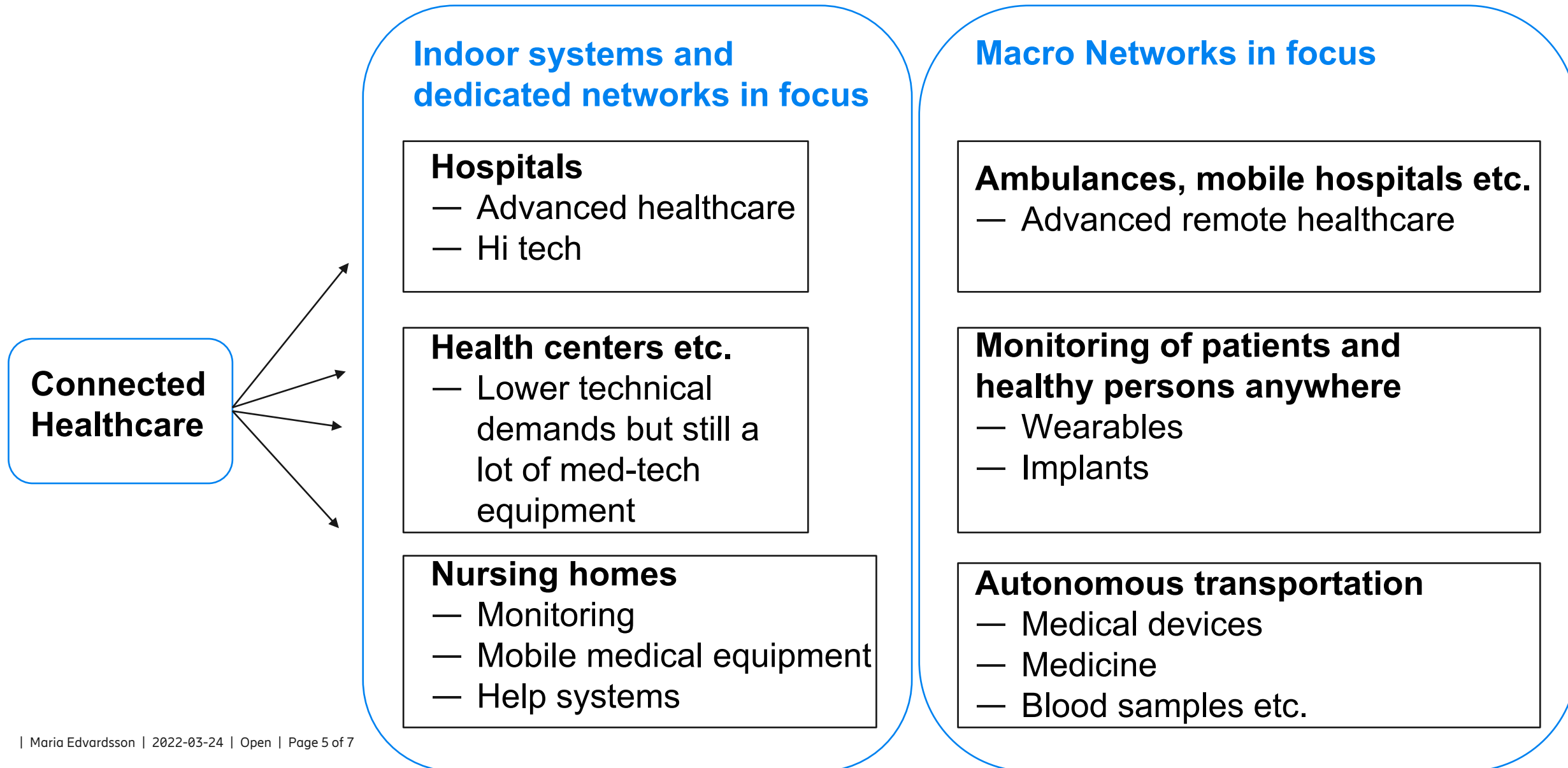
AI can for example be very useful in finding a diagnose by combining many data sources

AI is good for long time monitoring and finding anomalies etc

Ericsson focus: How can our technology help to drive the health tech industry?



The healthcare use cases in a connectivity view



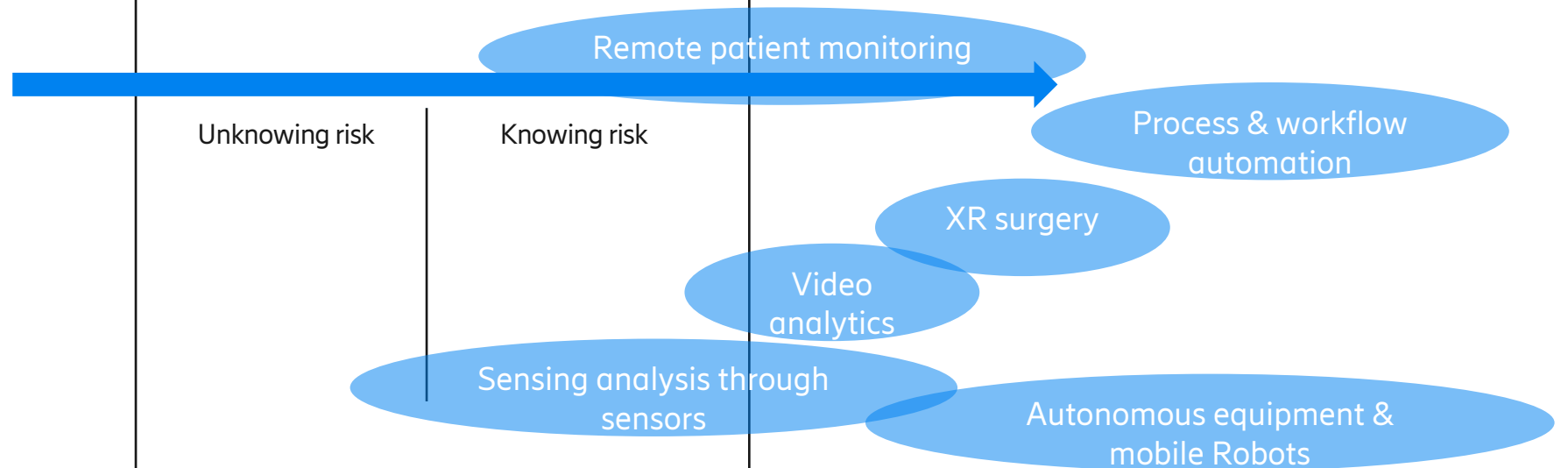
Stages



Healthy

At Risk

III



- Very little money spent from “government health”
- Apple and Google etc plays big role here
- Mostly “private money spent
- Any type of id,
- Under the control of the user (own validated)

- Much cheaper treatment if you can go from unknowing risk to knowing risk
- Very little money spent here
- Room for Innovation
- How can health data be used by the hospitals (authentication , security...)

- Almost all the money for health is spent here
- Identity is social security number (BankID owned by banks)

ML and healthcare



- Many things to improve healthcare can be done with today's technology!
- Some research areas
 - Critical networks – AI for operation and stability
 - AI+ XR for e.g. physiotherapy
 - Sensors + AI for people monitoring
 - Remote experts
 - Brain communication
- Sustainable digitalization
 - What will our society gain by the digitalization of healthcare sector?
 - Fulfilment of UNSDGs

