



University of St.Gallen

Embedded Sensing Systems

Translating the physical world into data

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From insight to impact.

Research on Embedded Sensing Systems (and Industrial Networks)

"300 sensors on board the F1 cars to be analyzed for reliability and performance."



Which Fitness Tracker Is Best For You? Apple Watch vs. Fitbit vs. Oura vs. Garmin vs. Whoop



HYDROPOWER PLANT INSPECTION IN THE AUSTRIAN ALPS



INDUSTRY APPLICATIONS

How to explore **new** (invention) and **existing** (innovation) use cases?

SENSING THE REAL WORLD

How to track and trace the **analogic, real-world** into the **digital space**?

CONSTRAINED NETWORKING

How to **communicate to/from sensors** observing constraints?

EMBEDDED HARDWARE/REAL-TIME OPERATING SYSTEMS

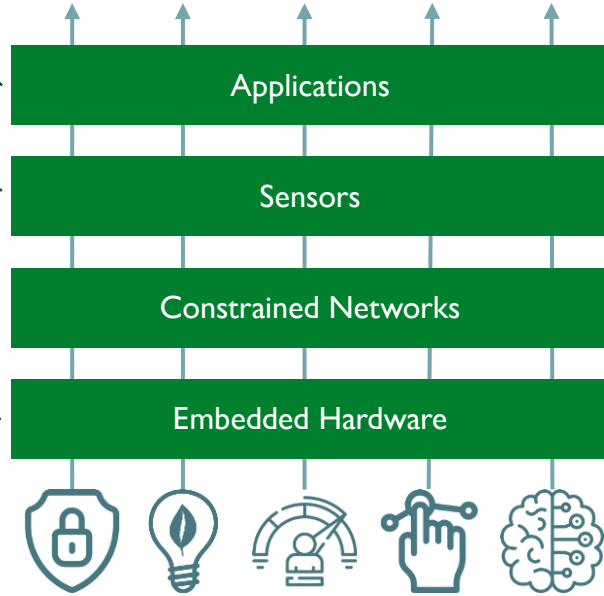
How to explore new/existing **hardware architectures** to **optimize transversal areas**?

TRANSVERSAL AREAS

How to explore tradeoffs and optimizations given application constraints such as **accuracy, security, energy efficiency, performance/scalability, usability**



Real-world Applications



The ICV-HSG in Vorarlberg

