

**TAL
TECH**

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Engineering at TalTech**

SMART INDUSTRY CENTRE (SMARTIC)-INTEGRATOR OF DIFERENT INDUSTRY 4.0 TECH

<http://smartic.ee/>

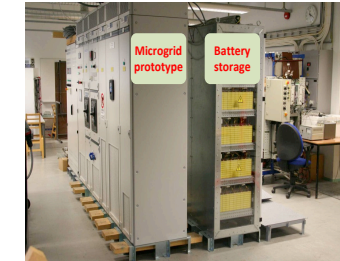
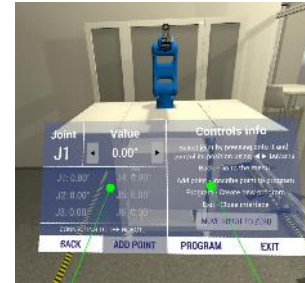
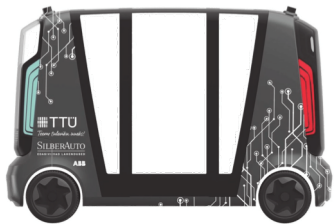
Project number: 2014-2020.4.01.16-0183

Measure: Estonian Research Infrastructures Roadmap

Budget: 1 977 511,00 EUR (incl VAT)

Support: 1595 173,00 EUR.

Coordinator: Tallinna Tehnikaülikool (TalTech)



SELF-DRIVING CARS

3D PRINTING

INDUSTRIAL ROBOTICS

DIGITAL TWINS & VR/AR

SMART GRID SOLUTIONS

PREDICTIVE MAINTENANCE & MONITORING

TAL TECH

Eesti Maaülikool
EMU Estonian University of Life Sciences

AI DIH network

Smart IC

Europa Liit
Euroopa Regionaalarengu Fond

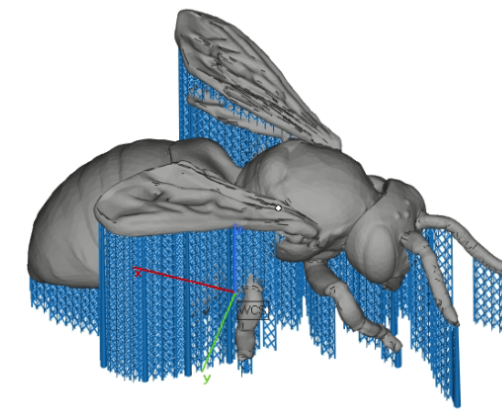
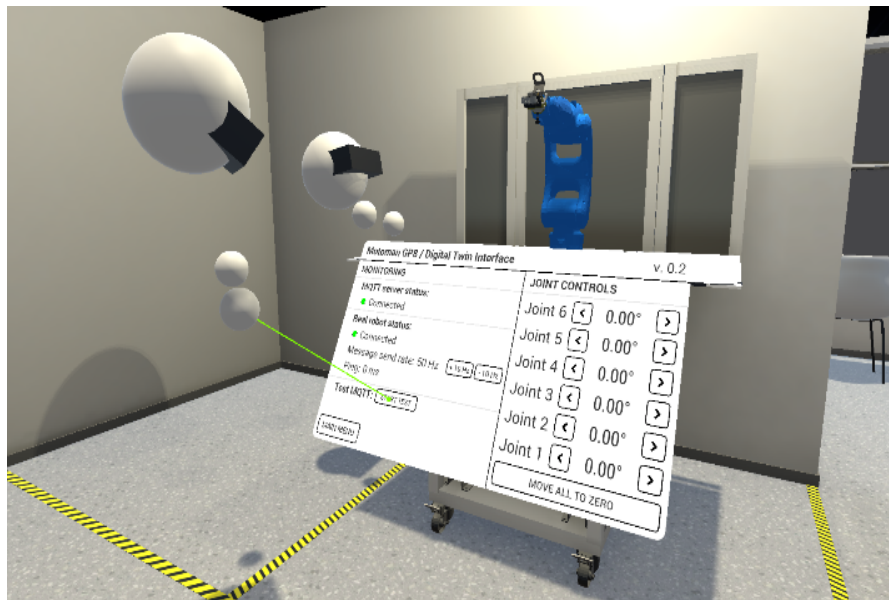
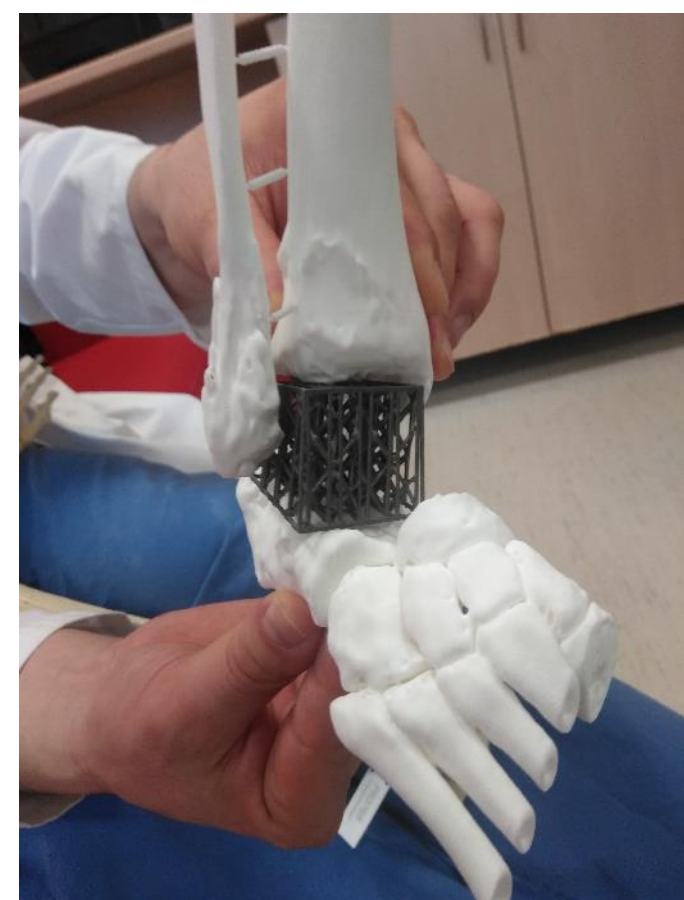
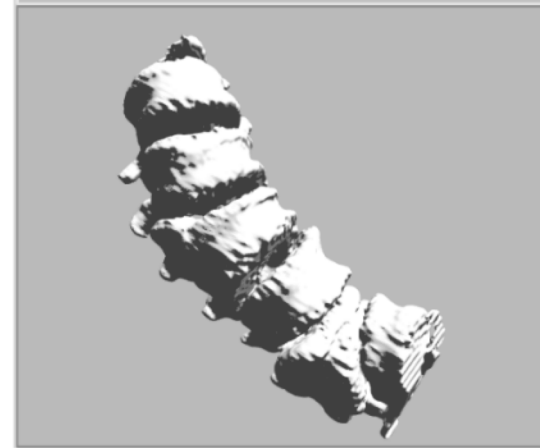
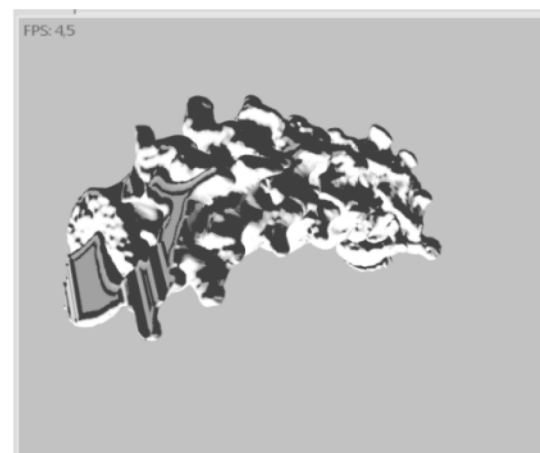
Eesti tuleviku heaks

Photos by : Raivo Sell, Vladimir Kuts, Yaroslav Holovenko, Kristo Karjust, Dmitri Vinnikov

CASE STUDIES



- Smart Health – 3D printing for East Tallinn Central Hospital
- A memorial to the victims of communism – individualised stainless ex-proof bees
- VR/AR for real-time control of robots & machine tools



Photos by : Lauri Kollo, Meelis Pohlak, Vladimir Kuts, Tauno Otto, Yaroslav Holovenko, Kristian Kruuser

DEFINING NEEDS FROM INDUSTRY RELATING TO HOW TO WORK WITH FUTURE INDUSTRY 4.0 CAPABILITIES

UCN, Denmark
FTO, Norway
AAU, Denmark
TalTech, Estonia
TM, Belgium
EUF, Germany

Cost reduction (47%)

- Single tech competences
- Stand-alone initiatives
- Low integration
- Trial and error approach
- Applying available knowledge

Improvement of existing products/processes (33%)

- Dual tech competences
- Integration across more than on process
- Digital data collection, but limited use for analytics
- Applying available knowledge

Innovation of new products/processes/markets (20%)

- Extensive integration, internal and external
- Competence strategy for future competence needs
- Digital data analytics use for developing new insights
- Seeking up-to-date knowledge

<http://www.tefffic.eu/>