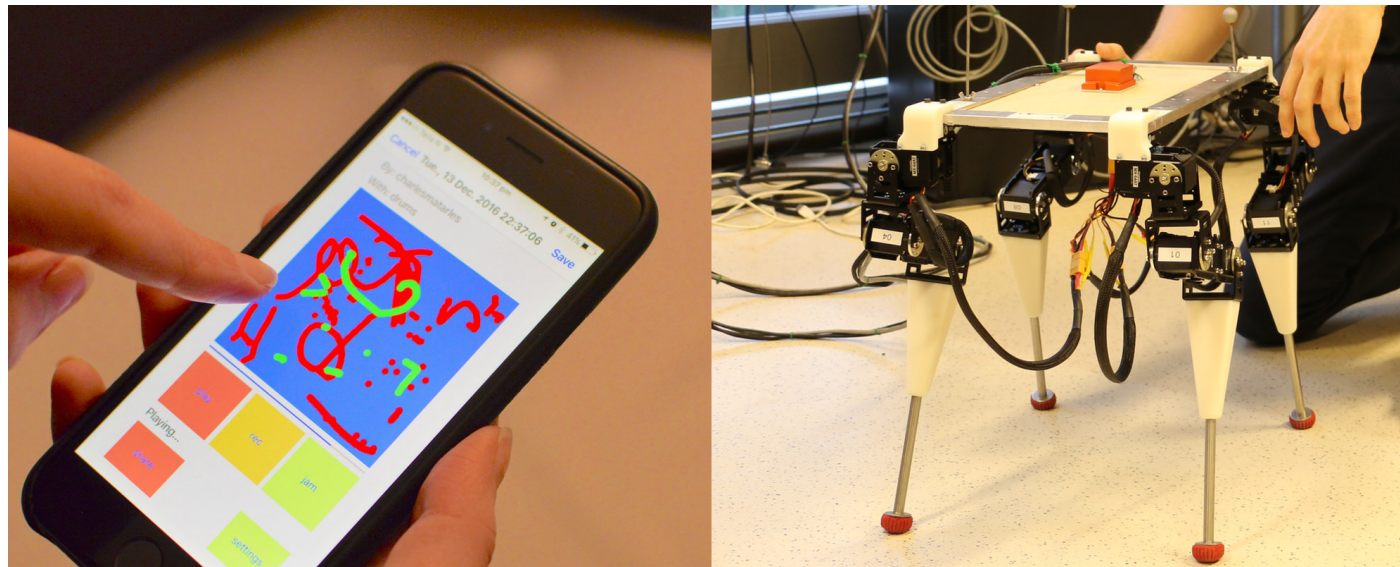


EPEC: Prediction and Coordination for Robots and Interactive Music

1 PhD (Tønnes Nygaard) + 2 post-docs (Charles Martin and Kai Olav Ellefsen) 2015-2019. Project manager: Jim Torresen



Goal: *Design, implement and evaluate **multi-sensor systems** that are able to **sense, learn and predict** future actions and events.*

<http://www.mn.uio.no/ifi/english/research/projects/epec>

Funding: FRIPRO, Research Council of Norway
(10% of proposals funded)



**The Research Council
of Norway**

MECS: Multi-sensor Elderly Care Systems

1 PhD (Trenton Schulz) + 2 postdocs (Weria Khaksar and Zia Uddin)

Project manager: Jim Torresen (2015-2019)

Goal: Create and evaluate multimodal mobile human supportive systems that are able to **sense, learn and predict future events.**



Project consortium:

- Robotics and Intelligent Systems group (coordinator)
- DESIGN group (IFI)
- National:
 - Oslo Municipality (Oslo kommune, Gamle Oslo)
 - Norwegian Centre for Integrated Care and Telemedicine (Tromsø)
 - XCENTER AS (3D sensor)
 - Novelda AS (ultra wideband sensor)
- International:
 - University of Hertfordshire
 - University of Reading Whiteknights

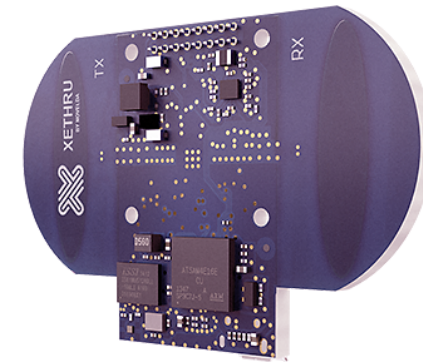
<http://www.mn.uio.no/ifi/forskning/prosjekter/mecs>

Funding: *IKTPLUS*S,
Research Council of Norway
(10% of proposals funded)

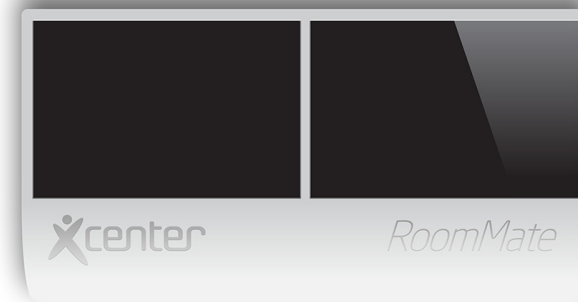


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MECS Project idea: Make a Robot into a Personal Safety Alarm



Novelda XeThru



Xcenter RoomMate

User Centered Design – Participatory Design

- involve real users in **actual use contexts**
(home of elderly)
- focus on behavior and **satisfying the needs**
and desires of the users
- achieve improvements through **iterative testing and improvement**
- **DESIGN PhD-students:** Trenton Schultz +
Diana Saplacan
- Oslo kommune: **Kampen Omsorg +**

INTROMAT: INtroducing personalized TReatment Of Mental health problems using Adaptive Technology (2016-2022)

1 postdoc: Enrique Garcia Ceja, Principle Invest. Jim Torresen



Goal: Increase access to **mental health** services for common mental health problems by developing **smartphone technology** which can **guide patients**.

<http://intromat.no>

Project Manager:

Haukeland Univ. Hospital, Bergen

Funding: *IKTPLUS Lighthouse,*
Research Council of Norway
4% of prop. funded

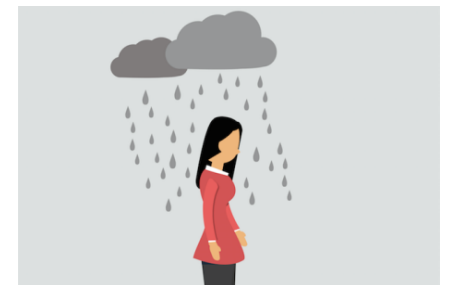


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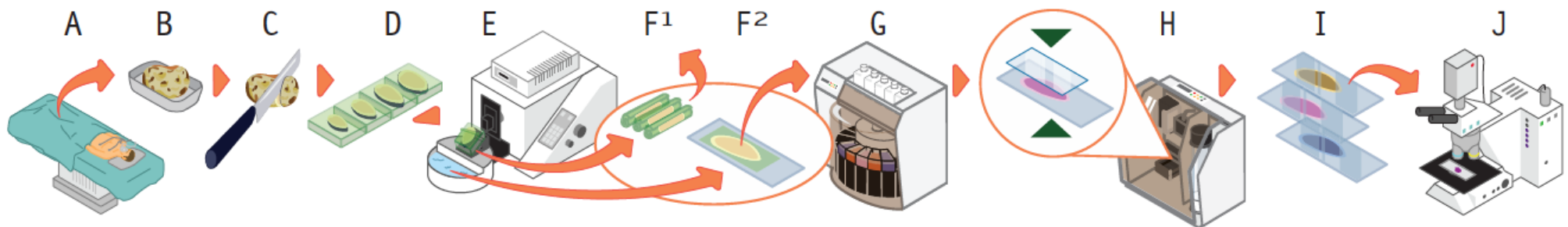
5 cases

- Relapse prevention for **bipolar disorder**
- Cognitive training in Attention Deficit Hyperactivity Disorder (**ADHD**)
- Job-focused treatment for **depression** in adults
- Early intervention and treatment for **social anxiety** disorder in adolescents
- **Psycho-social support** for women recovering from gynecological **cancer**.



1 PhD student: Stian P. Kvaale, Principle Invest. Jim Torresen

- **Goal:** Improving diagnosis by utilizing Big Data and software-driven automation of pathology.
- The pathologist are investigating the tumor material removed during surgery.
- Project Manager: Oslo University Hospital
- ROBIN: Clinical Decision Support System
- <http://domore.no>



Funding: IKTPLUS Lighthouse,
Research Council of Norway
4% of prop. funded

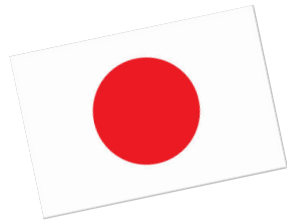


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Collaboration on Intelligent Machines

Norway ↔ US, Brazil and Japan

Project manager: Jim Torresen



- Short term mobility stay for meetings
- Sharing and development of curriculum and teaching material for courses
- Long term mobility stay (students)
- Intensive course/student workshop
- Workshop/conference org. activities
- New collaborations/guest lectures



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Funding: *INTPART 2017-2019*



Centre of Excellence for Interdisciplinary Studies in Rhythm, Time and Motion

Principle Invest./Cluster Leader: Jim Torresen

- The center will study the **perceptual and cognitive mechanisms** underlying our ability to experience the rhythm and act rhythmically.
- Interdisciplinary **collaboration** between **musicology, psychology** and **computer science**.
- Centre funding: 15 MNOK/year in 10 years from 2018



Funding: SFF/CoE
Research Council of Norway
7 % of prop. funded

