

A presentation of the research group

Robotics and Intelligent Systems



Robotics and Intelligent Systems (ROBIN)



Jim Tørresen
Professor, Group leader



Mats Høvin
Assoc. Prof.



Kyrre Glette
Assoc. Prof.



Kristian Nymoen
Assoc. Prof.
(shared with music dep)



Yngve Hafting
Senior engineer

Adjunct positions (20%):

Alexander Wold (assoc.prof.)
Jørgen Norendal (lecturer)
Roar Skogstrøm (lecturer)
Ståle Skogstad (assoc.prof.)
Ole Jakob Elle (assoc.prof.)

Postdocs:

Charles Martin
Enrique Garcia-Ceja
Kai Olav Ellefsen
Md. Zia Uddin
Weria Khaksar



PhD students:

Arash Ahmadi (MedFak)
Asbjørn Danielsen (HiN)
Eivind Samuelsen
Flavia Dias Casagrande (HIOA)
Justinas Miseikis
Jørgen Nordmoen
Kim Mathiesen
Sondre Engebråten (FFI)
Tønnes Nygaard

Students Bachelor ~60; Master: ~30
Robotics and Intelligent Systems program

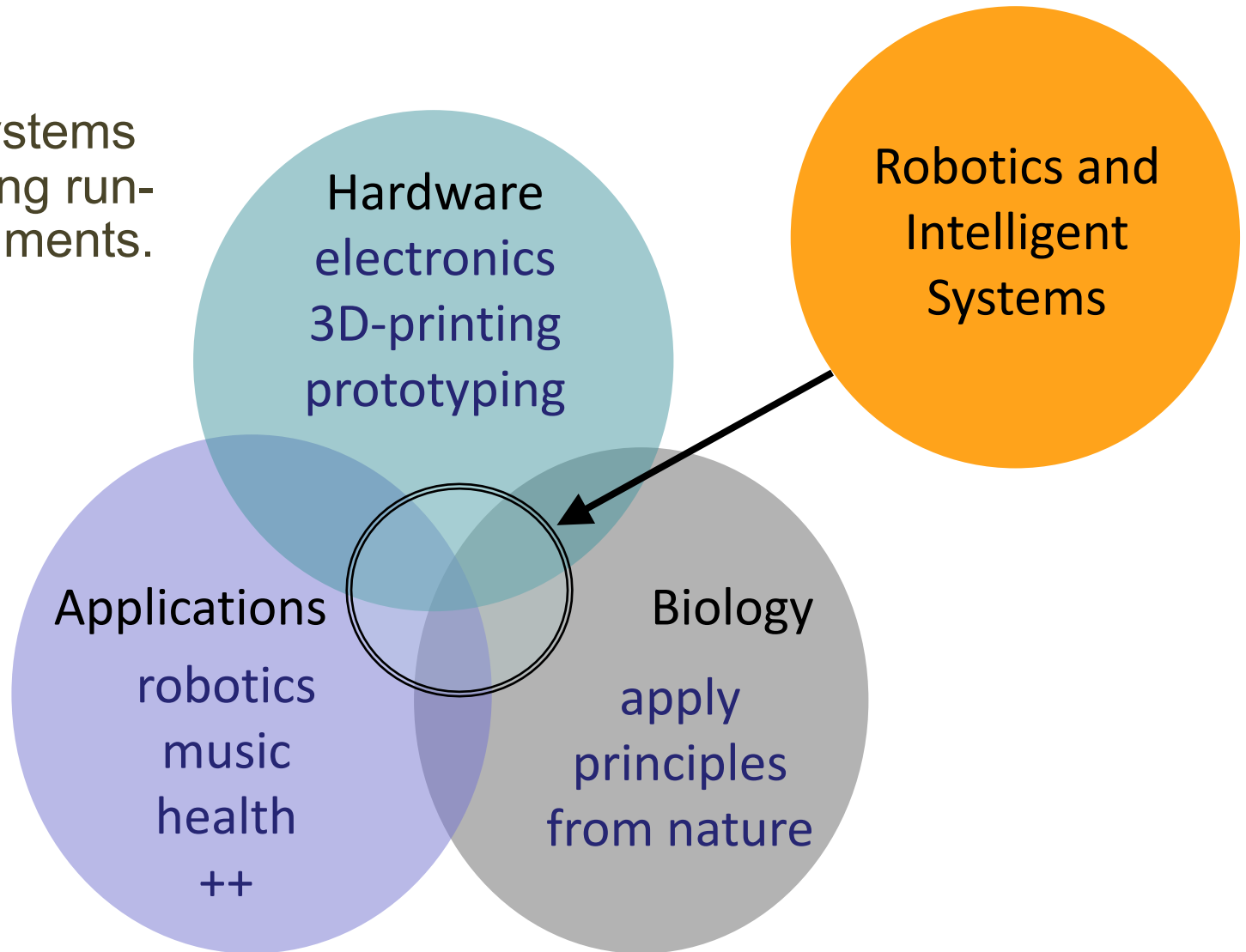
Students hired on hourly basis

Visiting researchers

Robotics and Intelligent Systems group

ROBIN

Creating systems
for demanding run-
time environments.



Motion Capture Facilities (ROBIN)

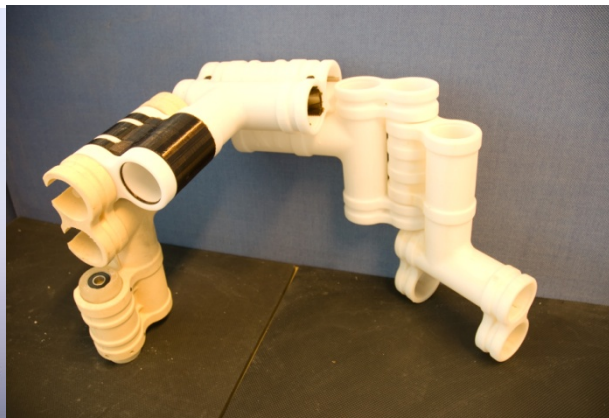
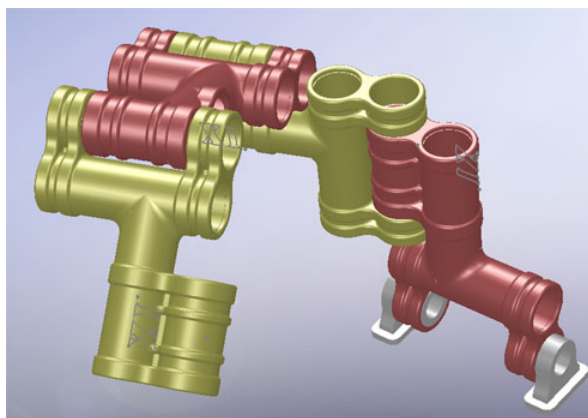
- Allows precise tracking of human and robot motion
- Camera-based and on-body motion capture



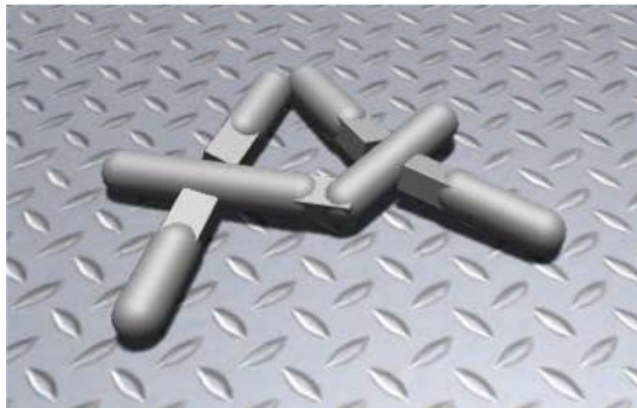
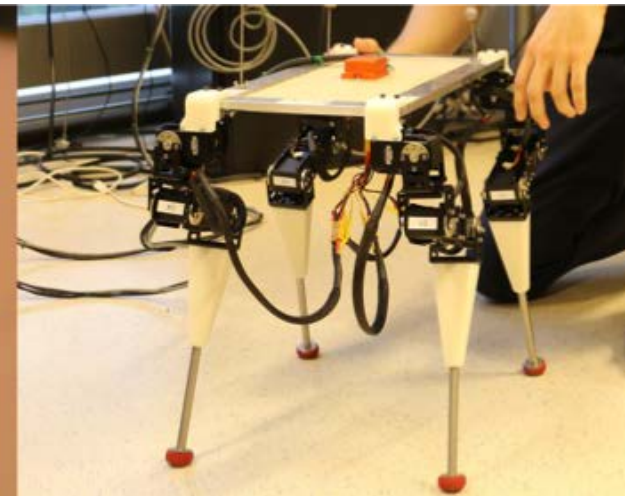
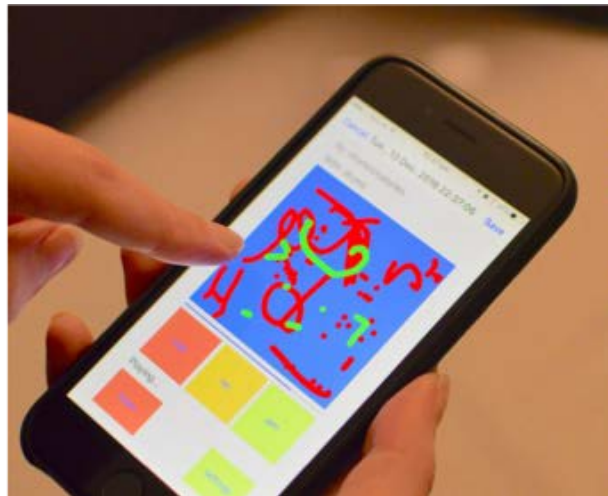
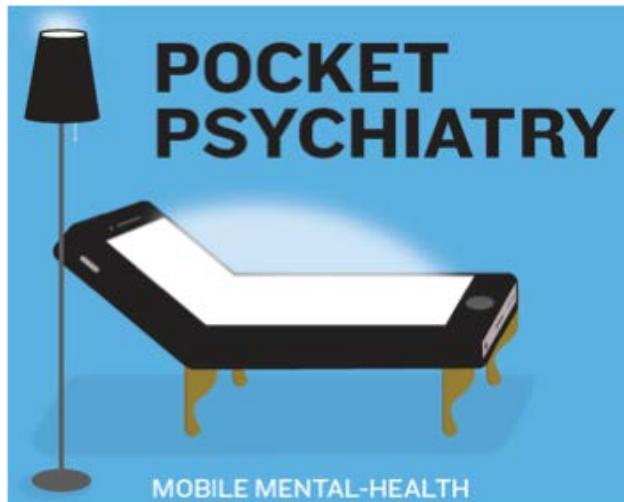
Rapid Prototyping Facilities (ROBIN)



- 3D printers and milling machines
- Large potential for developing innovative robot systems.

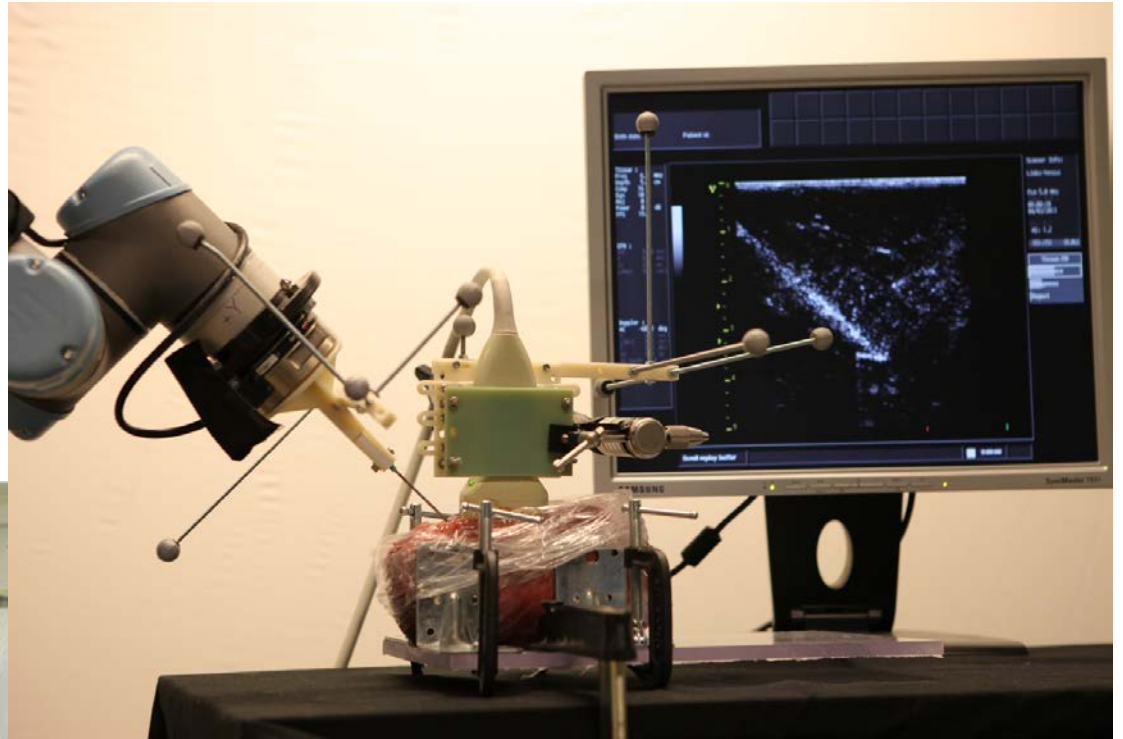
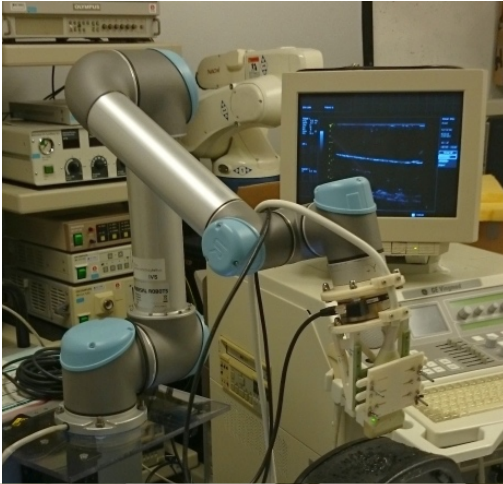


Robotics and Intelligent Systems research



Robot Surgery (National University Hospital)

Ole Jakob Elle (ROBIN)

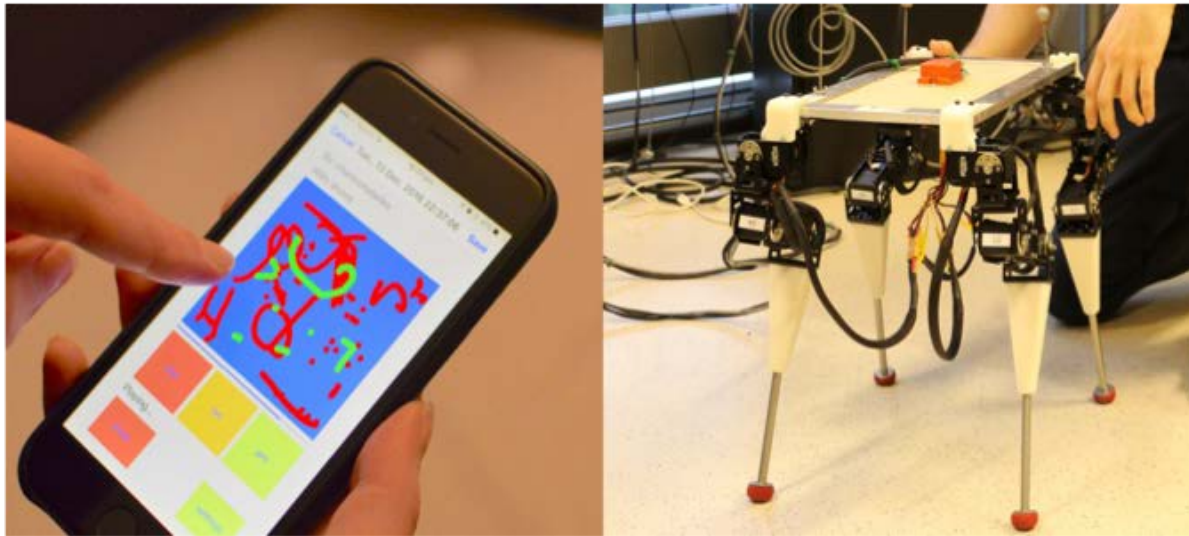


Environment Aware Robotics System using Multiple Kinect 3D Cameras by PhD student Justas Miseikis (ROBIN)



EPEC: Prediction and Coordination for Robots and Interactive Music

Research Council of Norway grant 240862.



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

MECS: Multi-sensor Elderly Care Systems

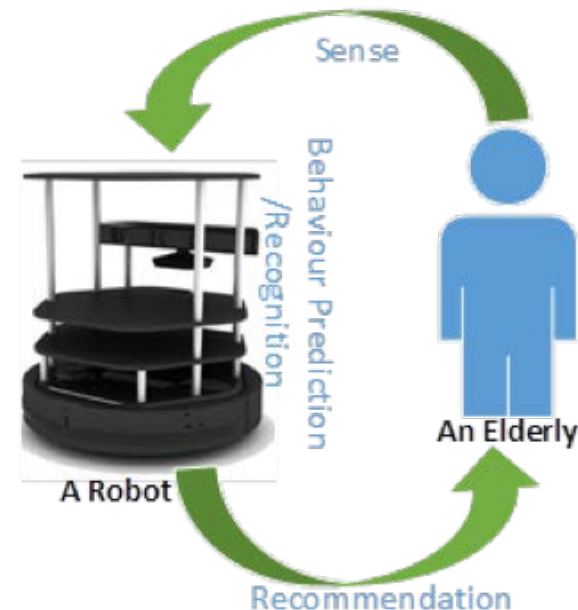
Research Council of Norway grant 247697

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



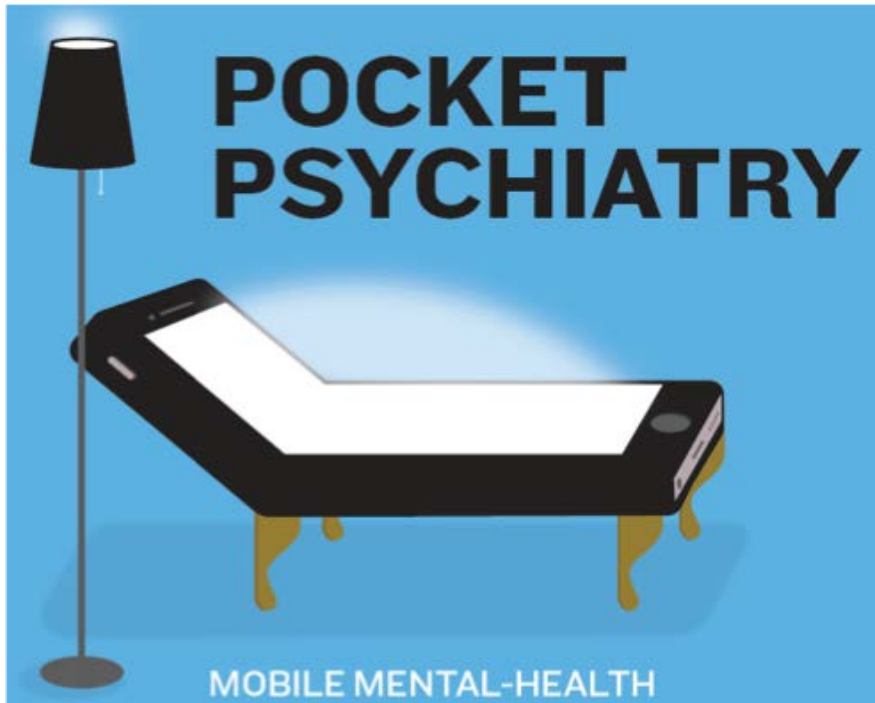
[Project Web page](#)

Funding: *FRINATEK*
Research Council of Norway



The Research Council
of Norway

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



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

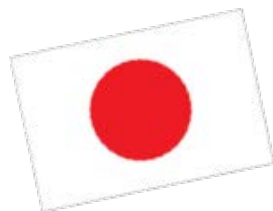
Funding: *IKTPLUS Lighthouse,
Research Council of Norway*



**The Research Council
of Norway**

Collaboration on Intelligent Machines Norway $\leftrightarrow$ 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



**The Research Council
of Norway**

Funding: *INTPART 2017-2019*



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

- 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** (ROBIN).
- Centre funding: 15 MNOK/year in 10 years from 2018



Funding: SFF/CoE
Research Council of Norway

