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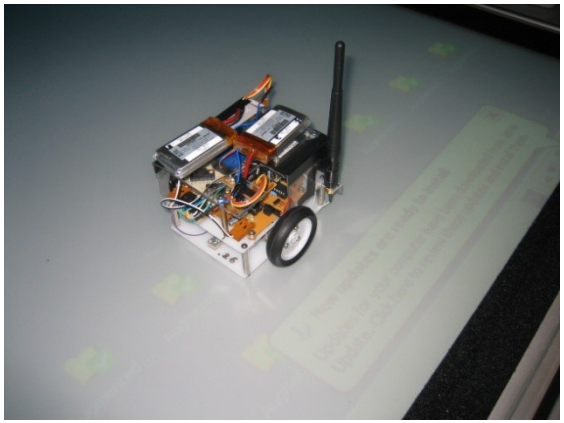
Two Minute Madness P05

Remote Active Tangible Interactions

Jan Richter, Bruce H. Thomas, Maki Sugimoto and Masahiko Inami



University of South Australia and The University of Electro-Communications

P05

RATI
Remote Coll.
Active Tangible
Presence
Furniture Layout
User Study

Each Robot Slaved

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D08

reacTIVision: A Computer-Vision Framework for Table-Based Tangible Interfaces

Kaltenbrunner, M. & Bencina, R.

Music Technology Group, Universitat Pompeu Fabra, Barcelona, Spain

++ open source framework for table-top interfaces, tracking fiducial markers attached onto physical objects, as well as for multi-touch finger tracking.

++ fast and accurate: stable position and angle calculation of currently 180 compact markers, in real time video stream

++ standalone application that sends Open Sound Control messages to attached clients. example projects are available for C++, Java, C#, Processing, Pure Data, Max/MSP, Flash …

++ binaries available for Windows, Mac OS X and GNU/Linux

http://reactivision.sourceforge.net/

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Siftables: Toward Sensor Network User Interfaces

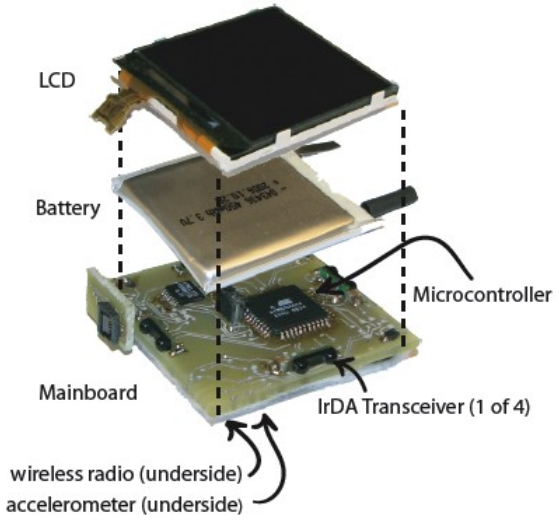
David Merrill, Jeevan Kalanithi, Pattie Maes

MIT Media Lab

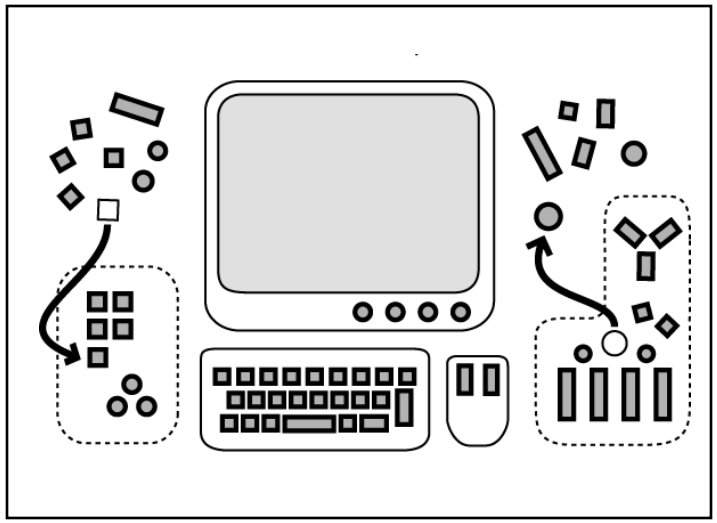
Siftables = Sensor Network + TUI

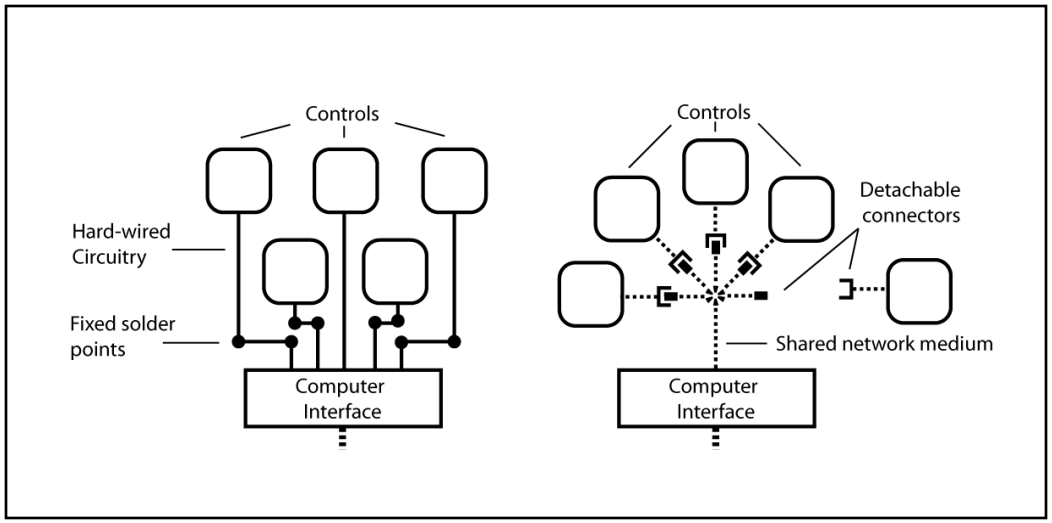
…a TUI that is light, direct, scalable & polymorphic

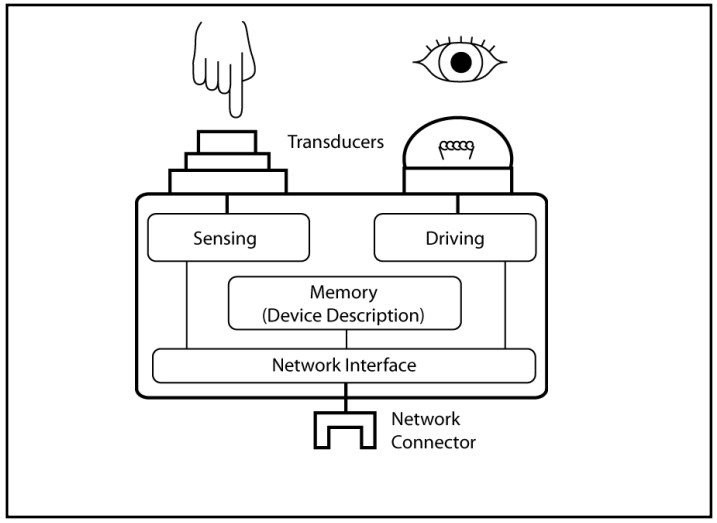
Siftables are inspired by the human ability to physically sort lots of physical objects.

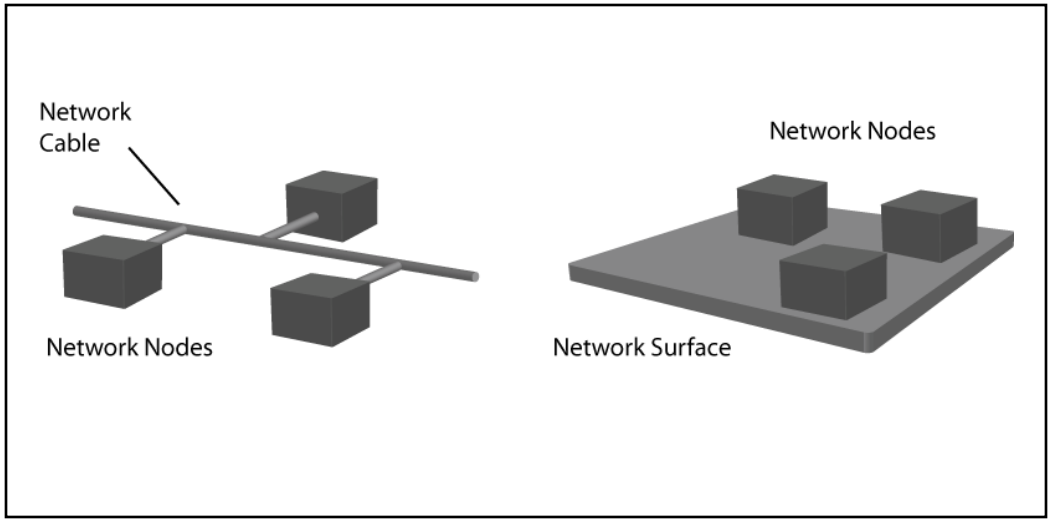


Voodoo I/O: Reconfigurable Interface Hardware

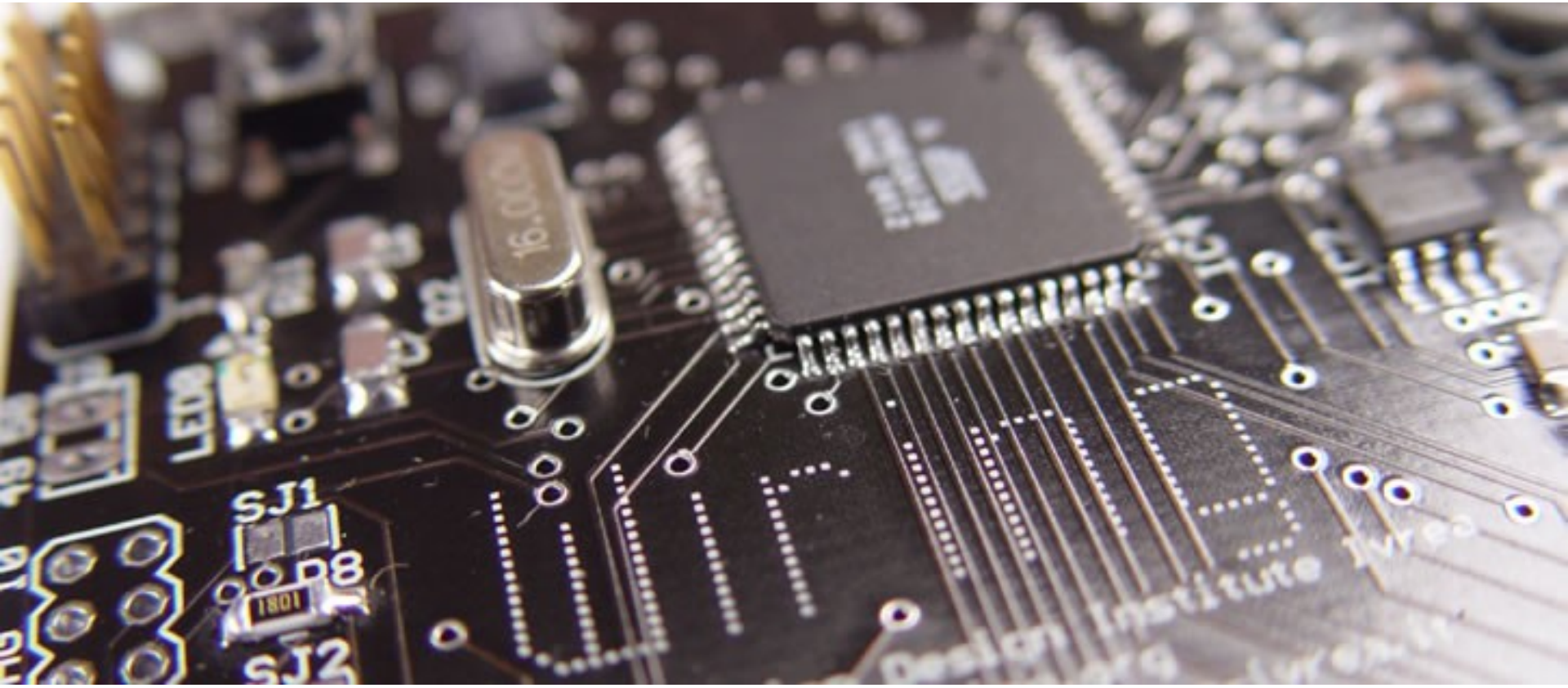








Demo: D1 | Paper: *A Malleable Control Structure for Softwired User Interfaces* (pg. 49)


SJ1
D8
SJ2

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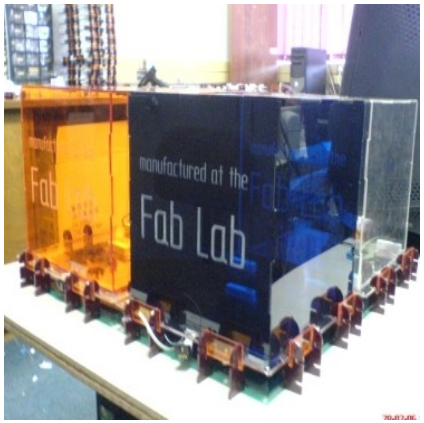
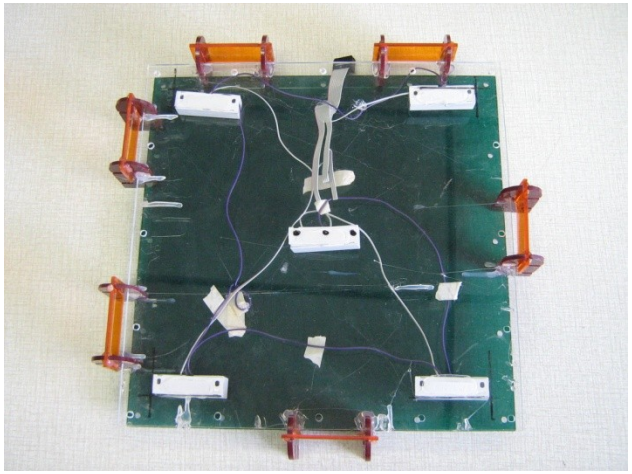
Two Minute Madness D15

Using Magnets in Physical Blocks that Behave as Programming Objects

Andrew C Smith



Meraka Institute



D15

Meraka Institute

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Two Minute Madness D03

Collaborative Ambient Systems by Blow Displays

Mitsuru Minakuchi Satoshi Nakamura

After diet

National Institute of Information and Communications Technology

D03

Making users to be aware information with wind

and more…

NICT

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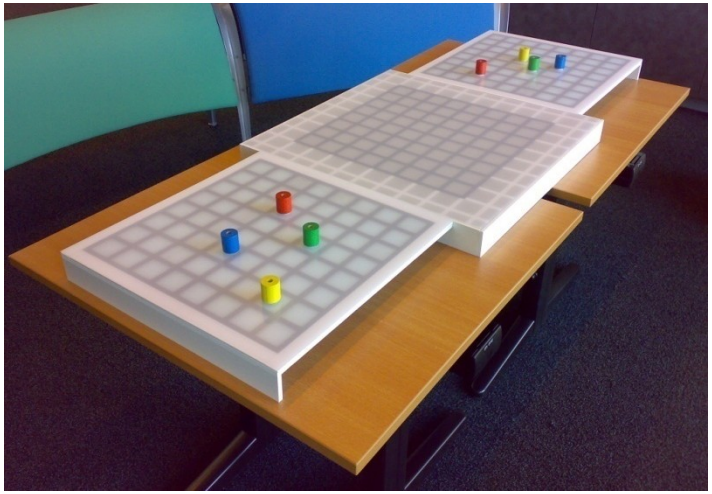
Two Minute Madness D11

TagTiles: optimal challenge in educational electronics

Janneke Verhaegh, Willem Fontijn, Jettie Hoonhout



PHILIPS

Let’s play TagTiles!
D11

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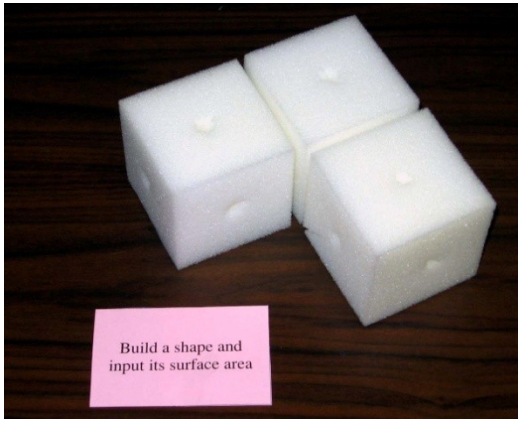
Two Minute Madness D10

Smart Blocks: A Tangible Mathematical Manipulative

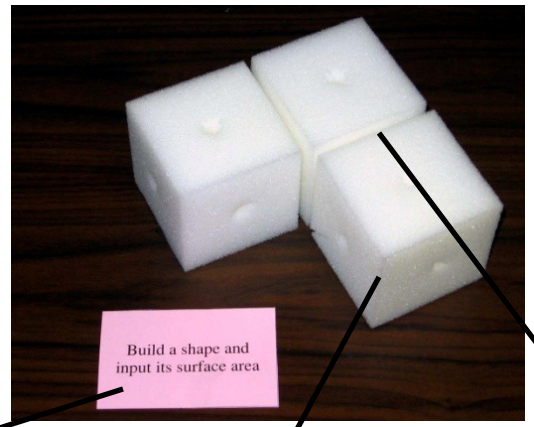
Audrey Girouard, Erin Treacy Solovey, Leanne M. Hirshfield, Stacey Ecott, Orit Shaer, Robert J. K. Jacob



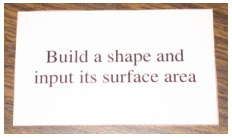
Tufts University, USA

Smart Blocks: A Tangible Mathematical Manipulative

D10



Invisible



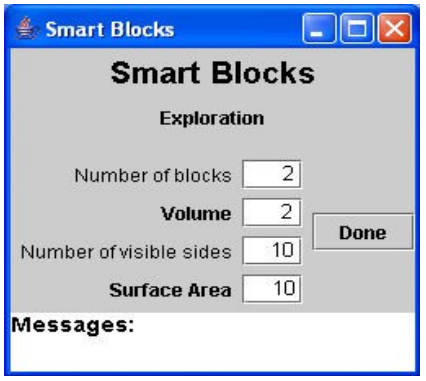
Question

Cube

Connector

hands-on learning

volume and surface area



Screenshot of the Smart Blocks interface

physical manipulation

real time feedback

RFID Technology

Tufts University, USA

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Two Minute Madness D02

CabBoots - Shoes with Integrated Guidance System

Martin Frey

Berlin University of The Arts, www.freymartin.de

D02

TEI '07 Two Minute Madness P10

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When is Role Playing really experiential?

Stella Boess, Daniel Saakes & Caroline Hummels

University of Technology Delft & Technische Universiteit Eindhoven

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P10

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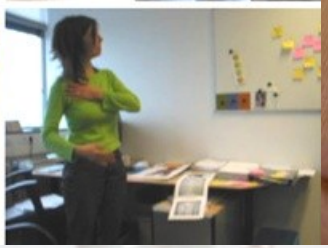

University of Technology Delft & Technische Universiteit Eindhoven

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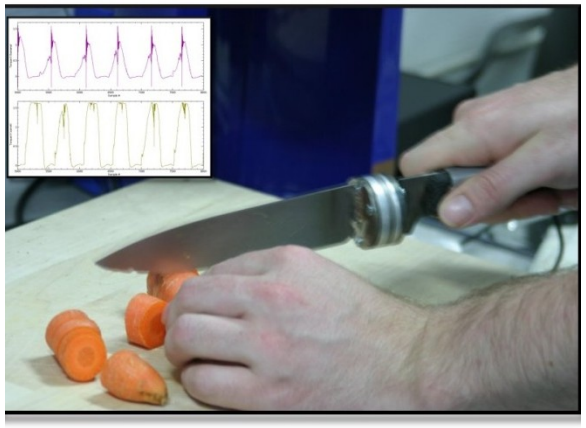
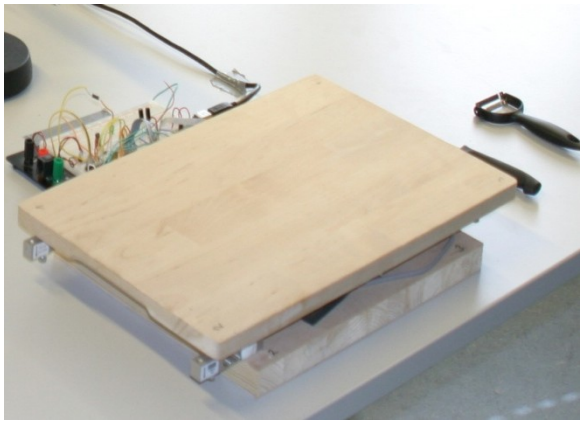
Two Minute Madness P01

Context-Aware Kitchen Utilities

Matthias Kranz, Albrecht Schmidt,
Alexis Maldonado, Radu Bogdan Rusu, Michael Beetz,
Benedikt Hörnler, Gregor Rigoll





University of Munich

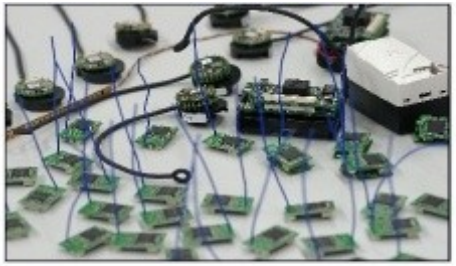
Nutrition planning

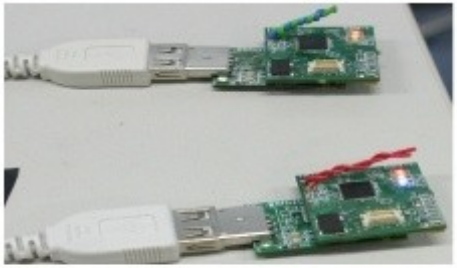
Shopping

Cooking

Eating

P01





University of Munich