



AT FULL SPEED

> HIGHLIGHTS OF
THE ACADEMIC YEAR
2012-2013

A! AALTO
MEDIA FACTORY



IMAGE: MINDRE.FI

The Aalto Media Factory AMF is one of the three factories of Aalto University that provide platforms for collaboration and development outside the usual scope of academic departments and research units.

AMF focuses on developing multidisciplinary media-related research and education, welcoming people from all around Aalto, and reaching out to commercial industry partners and non-profit organisations. We resource joint ventures, such

as research projects, course pilots and event productions by providing funding, coaching, tools and spaces.

AMF is an open service point for the students and faculty of all the departments of the six Aalto University schools. Furthermore, during the weekly open days, services such as the FabLab and Electronics Studio extend the invitation to the general public to come and learn by doing, hands-on.

Media Factory People



PHILIP DEAN
Director



JUHANI TENHUNEN
Factory manager



MIRA MUTIKAINEN
Financial assistant



THOMAS
RUOTSALAINEN
AV assistant



YRJÖ TUUNANEN
Researcher



MARKKU NOUSIAINEN
Producer

AV Productions



LEENA NÄREKANGAS
Coordinator



ANNA BERG
Media production



ANU MÄÄTTÄ
Fablab studio master



ALI NEISSI
SHOOSHTARI
Electronics studio
master



MASSIMO
MENICHINELLI
Producer

FabLab

Web Studio



JON FABRITIUS
Application analyst



OLIVER MANNER
IT architect

A! AALTO MEDIA FACTORY

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AT FULL SPEED

> HIGHLIGHTS OF
THE ACADEMIC YEAR
2012–2013

This report highlights some of the major Aalto Media Factory (AMF) activities from the ongoing academic year 2012–2013.

Since moving to its current premises at the South end of the Aalto School of Arts, Design and Architecture main building at Arabianranta the Media Factory has become a hive of activity involving Aalto's students and staff, but also a growing number of outsiders including our project partners, visiting artists and academics and the general public.

Generally the functions of AMF have reached stability and the factory's staff members have clearly defined areas of responsibility allowing for efficient multi-tasking and a diverse program of activities at all times. The Media Factory's new web site, designed by our Web Studio gurus, gives an instant overview of the functions as well as the topical events.

We have really worked hard to try and make our communication more efficient and our 'customers' have appreciated the development.

Media Factory is the liveliest unit on the Arabia campus these days as the numbers of people utilizing the factory has grown steadily. The auditorium and other working spaces are in constant use, especially for multi-disciplinary courses and projects of all kinds and we've often had to turn people away as the calendar is full for months to come.

Our major investment during the last two years has been in establishing the Aalto FabLab within the factory, including launching courses there and encouraging Professors and teachers to come and make their first experiments with prototyping technologies. During September 2012 the FabLab was host to workshops as part of the Open Knowledge Festival and we gained a lot of new friends and collaborators. It was a magnificent international gathering with over 1000 guests and our thanks goes to all those in the Aalto community who worked so hard with us in order to jointly organize and produce the event. The conference badges, produced with our laser cutter, have already become collectors' items!

PHILIP DEAN
Director, Aalto Media Factory

Media Factory is the liveliest unit on the Arabia campus.

MAY 2012

> HIGHLIGHTS

> **AMF Annual Report**
of the previous 2011-
2012 academic year
published and widely
distributed

> The official launch
of **Aalto People**

>> helps to find people at Aalto
>> people.aalto.fi

> **M-Scopes** seminar:
Visualizing Finance

>> Altogether, 60 guests from Aalto,
the Finnish media industry and
international university partners

> **Trashlab** workshop

> **Media BizLab**
course completed

> Evaluation and
categorisation of
proposals for the
OKFest (Open
Knowledge Festival)

>> Altogether, 100 proposals
from every continent

> More than
15 events in the
AMF auditorium

JUNE 2012

> HIGHLIGHTS

> **CaBuM** (Creative
Arts and Business
Management)
seminar

> **Enactive Avatar**
project starts

> Planning the
OKFest continues

> Preparing
AMF Tokyo

JULY 2012

> HIGHLIGHTS

> **Enactive Avatar**
continues

>> enactivecinema.net

> Planning the
OKFest continues

JUNE

Kick-off at Aalto FabLab

*On 15 June, more than
100 guests celebrated
the opening of the Aalto
FabLab, which can
be used by the Aalto
community.*

IMAGE: ANNA BERG



JUNE

Let's learn digital fabrication techniques!

The Digital Fabrication Studio course hurled students into the intersection of bits and atoms.

The Digital Fabrication Studio course, taught by **Massimo Menichinelli**, provided a general understanding of how to design and manufacture products and prototypes in a FabLab and in a global FabLab network using digital fabrication technologies and of how to be aware of their features and limitations.

Students learned about CNC milling machines, laser cutting machines, 3D printing machines and 3D scanning software and other specific design software.

The course provided students with a framework for understanding the open and collaborative design dynamics, business models and role of media when developing a digitally fabricated project. Students learned how information shapes design and manufacturing and about collaboration processes and artefacts in a FabLab, at the intersection of bits and atoms. They learned how to digitally fabricate a project or how to digitally modify an existing project; students also learned how to manage, embed and retrieve information about a project.

The course workload consisted of a series of small exercises to be developed

after course hours and a final project to be digitally fabricated and documented by the end of the course.

Various projects were developed by students: the projects included a digitally fabricated mould for chocolate and custom digital packaging, stories embedded within laser-cut objects, such as jewels and lamps, and a hand-blown glass vase prepared using a digitally fabricated mould.

Students learned how information shapes design and manufacturing.

The Digital Fabrication Studio course will be offered again in autumn 2013.

WANT TO GET FABRICATED?
noppa.aalto.fi > course code 25438
massimo.menichinelli@aalto.fi



AUG UST 2012

> HIGHLIGHTS

> Planning the
OKFest continues

>> 550 guests expected so far

> **AMF** two-day
strategy and planning
workshop

> 500 new Aalto
students pop in and
visit **AMF**

> **Trashlab**
lectures start

AUGUST

Aalto FabLab sharpened its expertise

*The Aalto FabLab staff
successfully earned their
Fab Academy Diplomas.*



The Fab Academy is a digital fabrication programme directed by **Neil Gershenfeld** of MIT's Center for Bits and Atoms (CBA) and is based on MIT's rapid prototyping course, *MAS 863: How to Make (Almost) Anything*.

The Fab Academy has spread to Fab-Labs around the world. The programme provides advanced digital fabrication instruction through a unique, hands-on curriculum, and provides students and staff with access to technological tools and resources.

The Fab Academy Diploma consists of a five-month, part-time student commitment, and is based on completing all of the Fab Academy Certificates.

Progress towards the diploma is evaluated according to the student's acquired skills rather than time or credits. The Fab Academy is directed by **Neil Gershenfeld**, it is produced by **Sherry Lasziter**, it is coordinated by **Tomas Diez** and the students are managed by **Anna Kaziunas** France.

**The development of
digital fabrication
is based on creating
codes that do not
just describe things:
they *are* things.**

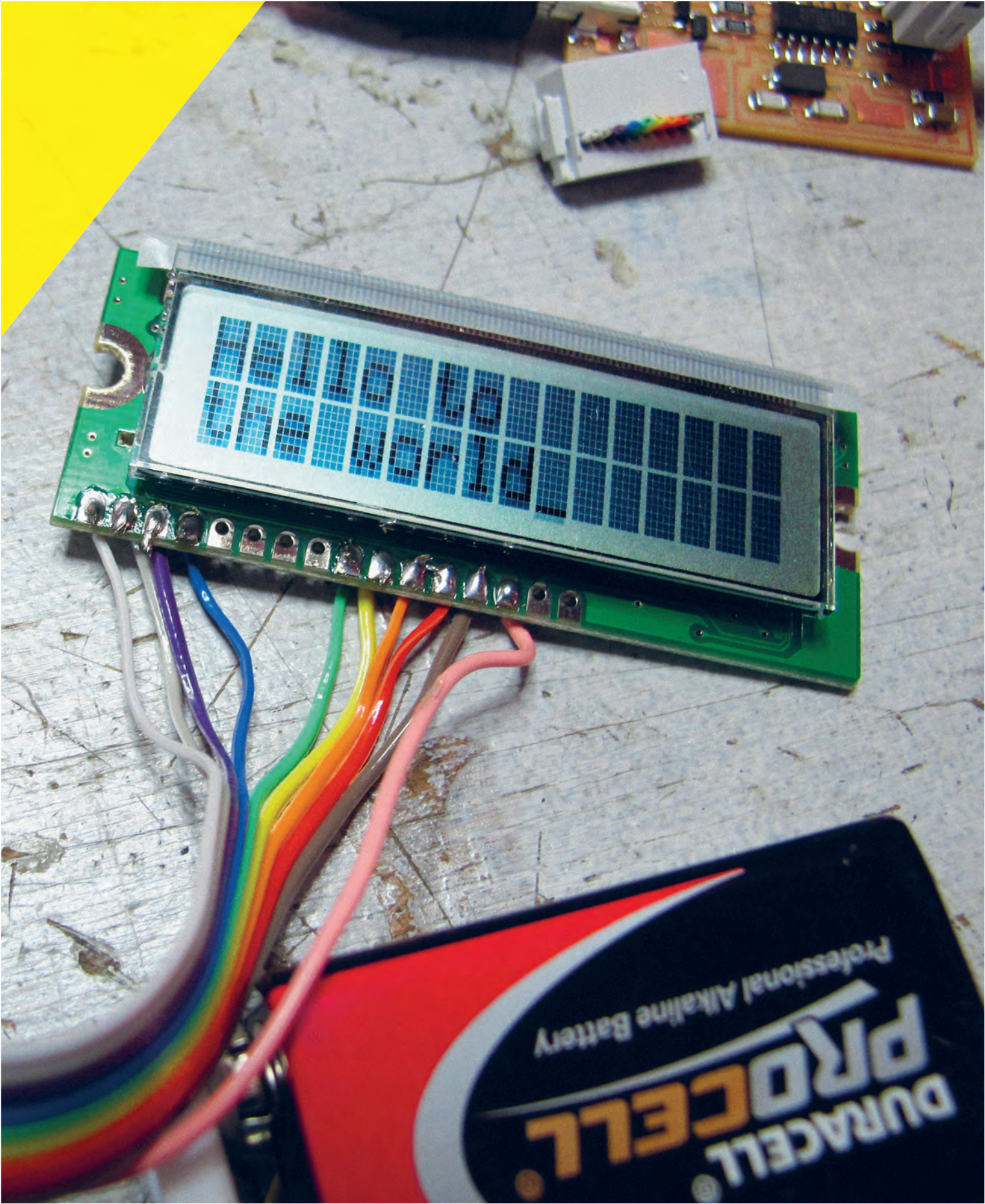
Just as communications and computation moved from analogue to digital, resulting in PCs and the Internet, the digitisation of fabrication is leading to personal fabricators that will make it possible for anyone to make almost anything anywhere. The development of digital fabrication is based on creating codes that do not just describe things — they are things, much in the same way as proteins are coded in molecular biology.

Anu Määttä and **Massimo Menichinelli** from Aalto FabLab both attended the Fab Academy and found it to be an invaluable opportunity for learning and for refining the Aalto FabLab.

ARE YOU NOW CURIOUS?

academy.cba.mit.edu/2012/students >
Anu Määttä; Massimo Menichinelli
fabacademy.org





SEP TEM BER 2012

> HIGHLIGHTS

> **Art and Technology** minor subject starts

> **Preparing for AMF Tokyo** continues:

>> Professor Shin Mizukoshi from iiii (University of Tokyo) visits AMF Helsinki

> **Visualizing Knowledge** seminar

>> 300 participants; organized by Aalto BIZ

SEPTEMBER

Art students explored electronics

The Electronics for Artists course was designed to satisfy the needs of art students in electronics. The course was an inspiring example of integrating disciplines at Aalto University.



Each Wednesday throughout the academic year, art students got together at FabLab to learn about the basic concepts of electronics as well as about electronic components and equipment. During each session, there was a small project with a set of preselected

components, and each student had a set and a breadboard for prototyping.

In addition to encouraging collaboration, the course aimed to increase student understanding by answering the types of tangible questions that they often feel represent obstacles that are too big to overcome: Why should a resistor be connected to a LED? Why does one need a voltage divider? Why is it not possible to make a 1 watt LED work using an Arduino? How do you make PCB boards? How do you check and debug a circuit that does not work?

With open hardware designs, such as Arduino, it is easier to start working; they make the programming language simpler as well. Besides, open design gives students an opportunity to further develop their ideas.

The Electronics for Artists course received favourable feedback from the students — even though they did not get any credits for it— and it represents a brilliant case of integrating knowledge and learning at Aalto University.

The course also revealed that there is a need to enhance art students' programming skills.

The Electronics for Artists course will start again in autumn 2013.

WANT TO GET ELECTRIC?
fablab.aalto.fi





The first Open Knowledge Festival: a lively week with more than 1,000 enthusiasts

The world's first Open Knowledge Festival was co-organised by the Aalto Media Factory: it was a lively week with more than 1,000 participants and 12,000 online views.

The 2012 edition of the Open Knowledge Festival (OKFest) at the Arabia Campus, 17-22 September, was the first event of its kind to address open knowledge on such a large scale — and its overwhelming success has provided significant momentum for open knowledge movements both in Finland and abroad.

The OKFest combined the annual OGDcamp and OKCon events with the theme Open Knowledge in Action, and it proved to be a great success. The festival explored the value that can be generated by opening up knowledge, how the ecosystems of various organisations can benefit from such sharing and the impacts that such transparency can have on our society. An experimental programme was planned collaboratively by more than 100 guest planners from around the world; it consisted of 13 key topic streams ranging from government transparency to open hardware.

The participants included representatives from 442 organisations: 68 universities and educational units, 74 government agencies or public sector institutions, 176 associations and foundations and 124 corporate or private sector employers. The programme consisted of 134 sessions, including 306 individual presentations, 67 hours of hackathons and 61 hours of satellite events.

OKFest 2012 was a great boost for the local open knowledge scene and was followed by another event, the OKFest Finland Convention, in February 2013.

The Open Book, a multi-author publication and one of the many legacies of OKFest 2012, will be published later in 2013.

OKFest was a great boost for the open knowledge scene.

The next OKFest will take place in Geneva in autumn 2013.

MAIN ORGANISERS:

Open Knowledge Foundation | Aalto University Media Factory | The Finnish Institute in London

MAIN PARTNERS:

Sitra | Helsingin Sanomat | IBM | Ministry of Education and Culture of Finland | Siemens | Forum Virium Helsinki | Sida – Swedish International Development Cooperation Agency | Ministry of Foreign Affairs of Finland

PARTNERS:

Sunlight Foundation | AVO | Ixonos | COSS | Ministry of Justice of Finland | Tieto | HH Partners Attorneys-at-law Ltd | Aalto University Professional Development | Pixelache | Microsoft | Aalto University Service Factory | YLE | Martela | Flo Apps | Open Ministry | Tieto näkyväksi – Visualizing Knowledge 17.9.2012 | Screen.io | SUSE | EIT ICT Labs

ARE YOU NOW OPEN AND EXCITED?

okfestival.org
info@okfestival.org



IMAGE: VEIKKO KÄHKÖNEN

IMAGE: AALTOMEDIA LAB



IMAGE: VEIKKO KÄHKÖNEN

IMAGE: AALTOFABLAB



IMAGE: DANIEL SCHILDT

Streaming of OKFest

Aalto Media Factory organised a live streaming of the *Open Knowledge Festival*. Please find here some key figures:

- 150 hours of recorded video
- 7 simultaneous live streams from different festival venues
- a 16-member video team consisting of professionals and festival volunteers
- more than 12,000 live views and the figures keep growing
- **Hans Rosling's** presentation was a hit, receiving more than 6,000 live views; by May 2013, the view count was 21,000
- 2 broadcasts embedded live on Helsingin Sanomat's (newspaper) site

The live streaming was coordinated by **Anna Berg** from the Aalto Media Factory

WATCH AND ENJOY
okfestival.org/streams/



IMAGE: DANIEL SCHILDT

OCTOBER

Media Factory Tokyo

The Media Factory Tokyo project is building a bridge between the Aalto University and the University of Tokyo.

During the years 2011–2013, Aalto University has been scouting out the possibilities to develop various ways to support sustainable collaboration between researchers and research teams at Finnish and Japanese universities.

The initial plan of the *Media Factory Tokyo* project is to build a bridge between Aalto Media Factory and the Interfaculty Initiative in Information Studies (iii) at the University of Tokyo (Todai), and to establish an Aalto presence in Tokyo as well as a Todai presence in Helsinki in a way that would comply with the interests and practices of both universities.

Todai will be starting a new *Global Creative Leaders* programme in 2013; this will open up new possibilities for building sustainable collaboration that incorporates student, researcher and teacher exchanges and joint research projects. Aalto will continue to develop other, corresponding projects and modes for working together.

Both Aalto and Todai also welcome other universities to join the collaboration in order to build a broader community of researchers interested in the exchanges between Finland and Japan.

COLLABORATIVE PARTNERS

Shin Mizukoshi, Interfaculty Initiative in Information Studies, University of Tokyo | Hideki Koizumi, Department of Urban Engineering, University of Tokyo | Kari-Hans Kommonen, Aalto ARTS, Department of Media | Mikko Villi, Aalto BIZ, Department of Communication | Miikka Lehtonen, Anna Salo and Toni-Matti Karjalainen, Aalto BIZ, IDBM and FLUID project | Marketta Kyttä, Aalto ENG, YTK | Philip Dean and Juhani Tenhunen, Aalto Media Factory

MORE COLLABORATION?

kari-hans.kommonen@aalto.fi



OCT OB ER 2012

> HIGHLIGHTS

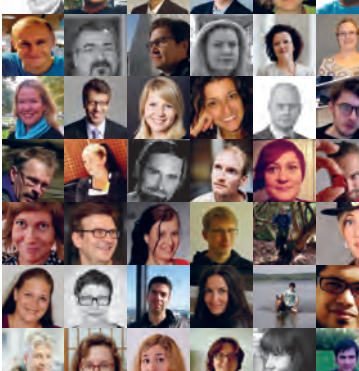
> **AMF Web Studio and Aalto ARTS Books** plan the **Musta Taide** web site

>> mustataide.fi

> **Aalto People** application gets new features

>> Aalto People helps to find interesting work and study-related contacts at Aalto University. It is possible to browse the various units and schools or search for names and keywords.

>> aalto.people.fi



> **M-Scopes** project presented at the ECREA Conference

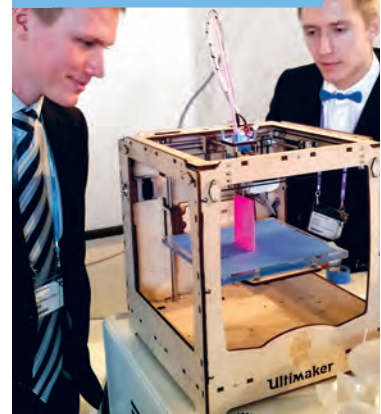
>> www.ecrea2012istanbul.eu/

> **M-Scopes:** Planning for the **Parsons-Aalto Visualizing Finance Student Competition** continues

>> The idea for the competition was born in the M-Scopes seminar in spring 2012

> **Digital Fabrication Studio** course up and running

> **FabLab** participates in the IBM Smarter Business and WÄRK:Fest events



> **Nordic workshop** for educators in the creative fields

>> "How do we unleash creative potential through entrepreneurship?"

OCTOBER

Welcome one, welcome all: Open Tuesdays at Aalto FabLab

Public access to the digital fabrication equipment is the core of the FabLab concept — this is also true at Aalto FabLab.

FabLabs are a network of places with digital fabrication equipment. The Fab charter dictates that FabLab's should be open to the public during at least part of their opening hours, including people who are not affiliated with the FabLab's host institution.

Aalto FabLab decided to go along with the Dutch model of public access: anyone is welcome on Open Tuesdays, without prior announcement, to come and see the place and make anything they have in mind at no cost.

We would, though, like to get something in return: please show us and tell us what you made, and how you made it, so that future visitors may also be inspired.

Open Tuesdays have turned out to be the busiest time and have contributed to the most inspirational activity taking place at Aalto FabLab: from simple first tryouts with the laser cutter and 3D printers to DIY speaker boxes and reproductions of historical artefacts (and, indeed, anything in between).

In the future, Aalto FabLab wishes to keep alive the *just stop by* mentality, as well as start catering better to more complex projects that will require more than ten minutes on the machine.

COME MAKE SOMETHING!
fablab.aalto.fi
[flickr.com/aaltofablab](https://www.flickr.com/photos/aaltofablab/)



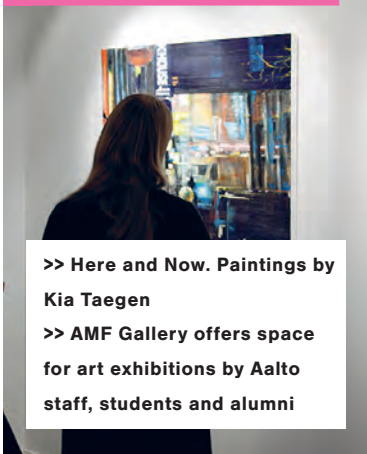


IMAGE: AALTO FABLAB

NOV EM BER 2012

> HIGHLIGHTS

> The first exhibition at the **AMF Gallery**



>> Here and Now. Paintings by
Kia Taegen
>> AMF Gallery offers space
for art exhibitions by Aalto
staff, students and alumni

IMAGE: ANNA BERG

> **FabLab** workshop
with the students from
Laurea University of
Applied Sciences
>> "Is Openness Intimidating?"

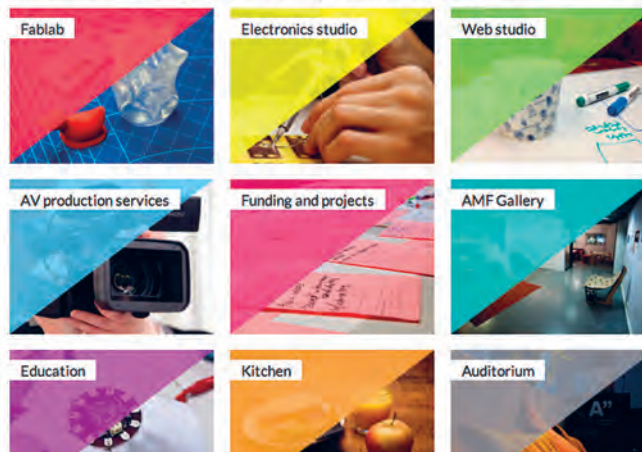
> **Afternoon for
Open Data**

Opening of the new AMF website

AALTO MEDIA FACTORY

Fablab Electronics studio Web studio AV production services Funding and projects
AMF Gallery Education Kitchen Auditorium Meeting room AV edits
AV Production equipment About Media Factory Contact us News and Events

Apply now for AMF Seed
Funding!



About Media Factory

One of Aalto University's
three factories, located at
the School of Arts, Design
and Architecture.

Contact or visit us

Find us online, or at the
Arabia campus.

News

12 Mar 2013
Nokia 3DK Hacking workshop
26th and 27th March
Nokia 3DK Hacking is a two-day
workshop and
11 Mar 2013
Faux dance performance
featur
FAUX-teaser from Aalto
Aaltooski Company on Vimeo.
For
1 Mar 2013
SIIVOUSPÄIVÄ (Cleaning day)
Siivousohjelmasta löydät 16.4

Researchers' Breakfast

The Researchers' Breakfast is a
monthly networking meeting for Aal-
to professors and researchers. At each
breakfast, one or two researchers pre-
sent their ideas and work in the cosy

auditorium of the Aalto Media Factory.
In November, early risers were able to
enjoy their morning meal for the first
time in such an environment.



IMAGE: LEENA NÄREKANGAS

NOVEMBER

The Media of Energy and Emotions

MDNM — The Media of Energy and Emotions project — generated a multidisciplinary platform for artists, designers and researchers in order to create new connections between media, energy and emotions.

We often do not perceive of the ways in which we consume energy, and therefore such consumption patterns are largely detached from our emotive selves. With an emphasis on the emotions induced by interactions in everyday life, the *MDNM* project focused on the relationship between the design of objects, the use of electricity and our perceptions of and responses to their interplay. Students from various backgrounds were called upon to ponder solutions to and concepts and manifestations of the ways in which we use energy.

The *MDNM* project consisted of a two-week multidisciplinary workshop, which was followed by an expert seminar and an exhibition of the student's conceptions of the relationship between energy use and emotions at the Arabia campus in Helsinki.

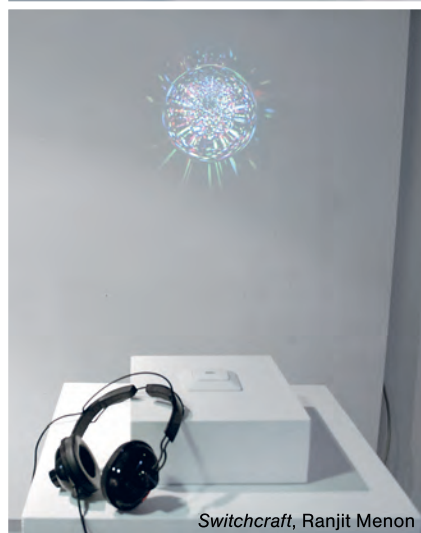
COLLABORATIVE PARTNERS

Aalto Media Factory | Creative Sustainability Master's Degree Programme | World Design Capital Helsinki 2012 | Nordic Climate Day

FEELING EMOTIONALLY ENERGETIC?
designresearch.aalto.fi/projects/mdnm



Play our Card Right,
Tania Rodriguez & Eevi Saarikoski



Switchcraft, Ranjit Menon



Light is History,
Karthikeya Acharya & Samir Bhowmik

DEC EM BER 2012

> HIGHLIGHTS

> AMF Gallery

>> Finland in Eye and Lens.

Photographs by Jee Wee Ong

Talking Trashlab

Trashlab invited artists, designers, hackers, makers, re/up-cyclers, activists and researchers to collectively tackle material and electronic waste.

Trashlab emerged in 2012 as a community of people who focus on experimental art-design-technology practices between hacker and maker cultures within the context of re/up-cycling and the increased availability of new fabrication tools.

Social gatherings brought together the new staff members of Aalto FabLab and local independent makers from Helsinki and Tallinn. Together, they discussed possible guest lecturers for the future. Aalto Media Factory's support for the *Talking Trashlab* project made it possible to structure the programme around monthly

lectures. All lectures were streamed and archived online, and the research interviews resulted in an overview of what was good, bad and ugly.

Several maker gatherings took place throughout the year; they were organised by Pixelache Helsinki, a transdisciplinary platform for experimental art, design, research and activism. Trashlabbers gathered and worked together at Aalto FabLab, at Camp Pixelache, at the Wärk Festival and Wasteland Festival, and in Tallinn at the Culture Factory Polymer.

Additionally, the *Light is History* project was developed during this collaboration process, and the recycled material-based public art installation and research objective were presented at the Wärk Festival in Helsinki in late autumn 2012. A research paper based on the project was presented at the Inclusive Museum Conference in Copenhagen in spring 2013.

The goal of the Trashlabbers is to continue exploring practice-based research pedagogy in waste and to create a social platform for future activities. Pixelache has continued in 2013 with monthly repair-cafe events at various locations and waste management site expeditions in the Helsinki area.

CORE TEAM

Monthly lectures coordinated by Andrew Paterson | Dual City workshops and research interviews by Cindy Kohtala | Streamed & archived documentation by Mikko Laajola | The cross-disciplinary project *Light is History* by Karthikeya Acharya & Samir Bhowmik

COLLABORATIVE PARTNERS

Karthikeya Acharya | Antti Ahonen | Reet Aus | Samir Bhowmik | Jennifer Gabrys | Peter Kuria Githinji | Cindy Kohtala | Mikko Laajola | Albert Laine | Judith Meijer | Sara Milazzo | Anu Määttä | Roland Pretz | Päivi Raivio | Toomas Savi | Rene Rebane | Justin Tyler Tate | Ernest Truely | Maria Törn | James Wallbank | Diana Wildschut | Harmen Zijp | Aalto Media Factory

WANT TO TALK TRASH?

trashlab.info
andrew@pixelache.ac

The research interviews resulted in an overview of what was good, bad and ugly.





IMAGE: ANTTI AHONEN

IMAGE: SAMIR BHOWMIK

Light is History, Karthikeya Acharya & Samir Bhowmik

JAN UA RY 2013

> HIGHLIGHTS

> **Ali Neissi Shoostari** starts work as an electro studio master

> Preparing the **Aalto Snapshots**

>> A video series presenting people, events, research and education at Aalto, produced by AMF

> The **Aalto People** web service is integrated with the **aalto.fi** site

> Preparing the workshop with **Kino Šiška** for the Emotional Window 2013 in Ljubljana

> **AMF Gallery**

>> **Phoneme and Image.** Illustrations by Marta Khrshanovskaya

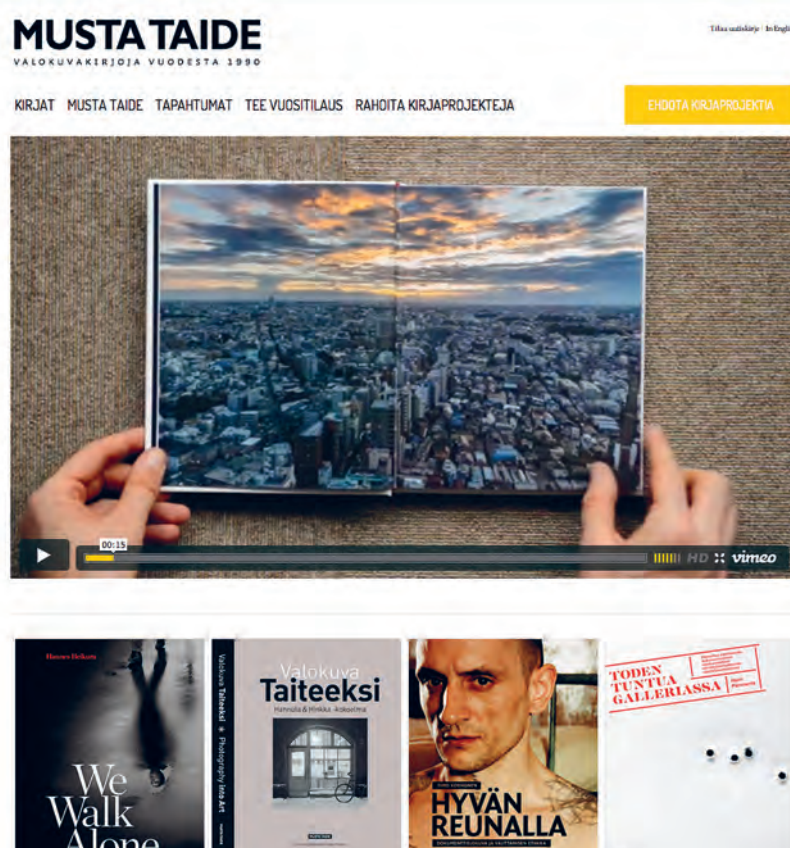
> Planning the Master's programme **Creative Business and Art Management**

> **M-Scopes:** Planning the **Visual Financial Literacy** course

Musta Taide website is published

Musta Taide publishes high quality photography books.

>> mustataide.fi



A Large-scale CNC router entered the Aalto FabLab



Last but not least: a large-scale CNC router completes the Aalto FabLab digital fabrication machine inventory.

All FabLabs have a blueprint of the machines that are needed for a running lab: a laser cutter for cutting and engraving a variety of materials, a vinyl cutter for cutting signs, templates and copper for producing flexible circuit boards, a precision milling machine for making moulds and milling PCB traces, and a large-scale CNC router. Typically, FabLabs also have 3D printers (and some have even been prototyped at individual FabLabs).

Aalto FabLab first concentrated on building the premises and also mastering the other machines; the staff had learned at the Fab Academy that mastering a CNC machine takes both time and focus.

The criteria for choosing a CNC included both local support in learning about the machine as well as technical backup for fixing broken parts. It was also important to find a machine that would fit into the lab space and be safe for visitors to operate.

Digima XY

- maximises usable space by having a cutting area of max 120 cm x 150 cm, thus making it possible to make furniture
- has a local Finnish vendor with technical support, a warranty, training and software packages available
- is familiar to other Aalto Arts workshop masters so that we at FabLab can learn from them
- uses software that is widely available within the CNC industry so that students who learn about the machine will be able to use their skills in the future as well

SEE MORE
fablab.aalto.fi



FEBRUARY 2013

> HIGHLIGHTS

> 3D modelling with **Rhinosaurus** course starts



> AMF Gallery

>> Nooa + Ofelia. Drawings by
Helmi Kajaste

> Reporting website of the seed-funded projects is created

FEBRUARY

M-Scopes: Mediated Significations of Finance M-Scopes 2.0: Visual Financial Literacy

The highlight of the M-Scopes: Mediated Significations of Finance project was the Parsons-Aalto Visualizing Finance student collaboration, which was based on ideas and connections of the M-Scopes seminar last year. Next, the M-Scopes project will focus on planning a Visual Financial Literacy course for 2014.

The M-Scopes: Mediated Significations of Finance project examines the visualization and multi-semiotic representation of financial issues in the electronic media. The M-Scopes project, conducted by **Yrjö Tuunanen** and **Heidi Hirsto**, continued and intensified its collaboration in particular with Parsons The New School For Design in New York. The collaboration culminated in a multidisciplinary course and joint student activities in spring 2013.

Currently, the M-Scopes project is placing increasing emphasis on financial literacy issues. Financial literacy is widely acknowledged as one of the essential elements of economic and financial stability and development, both in developed countries and in emerging countries. *The Visual Financial Literacy* initiative investigates how visual and multimodal representation tools and strategies can facilitate an

understanding of financial issues and advance financial literacy.

The initiative includes a new Aalto course, *Visual Financial Literacy*, by Tuunanen and Hirsto, which will be offered in 2014. Students will learn to analyse, assess and apply different visual and multimodal narrative tools and strategies for representing finance within the context of overarching financial (literacy) issues. The course is approved as a part of the teaching programme in the Department of Media (Aalto ARTS) and Department of Communication (Aalto BIZ).

Developing valid, interesting and applicable new practices for representing and teaching finance and for advancing financial literacy depends on multidisciplinary collaboration among future professionals in economy and finance, journalism and the new media, computational technologies and education. In addition to furthering ongoing research projects, the *M-Scopes* project will continue to work as a nodal point for researchers, students and practitioners in these fields.

The *M-Scopes* project's recent research findings were presented at the Helsinki Photomedia Conference in spring 2012 and at the fourth European Communication Conference, ECREA 2012, in Istanbul in autumn 2012.

COLLABORATIVE PARTNERS
Parsons The New School For Design,
Visualizing Finance Lab, New York |
Universidad Carlos III de Madrid, Department
of Communication Sciences | Aalto Media
Factory | National University of Singapore,
Multimodal Analysis Lab/Interactive Digital
Media Institute | Kulosaari Secondary
School, Helsinki

WANT TO SCOPE IT OUT?
yrjo.tuunanen@aalto.fi



FEBRUARY

Thinking e-textile

The Textiles Interaction Lab (TextIL) developed a resource and material pool for enhancing e-textile related projects and helped designers and researchers network with one another.

TextIL, a one-year project, came to a climax in the winter of 2013 by hosting the ArcInTex meeting in Helsinki in collaboration with Aalto's Embodied Interaction Lab. Workshops in 3D printing, thermal printing and e-embroidery were organised for PhD students, who had the opportunity to share and learn while trying out new techniques and the facilities available at Aalto ARTS.

ArcInTex is an international network of professionals and researchers from the fields of architecture, interaction design and textiles.

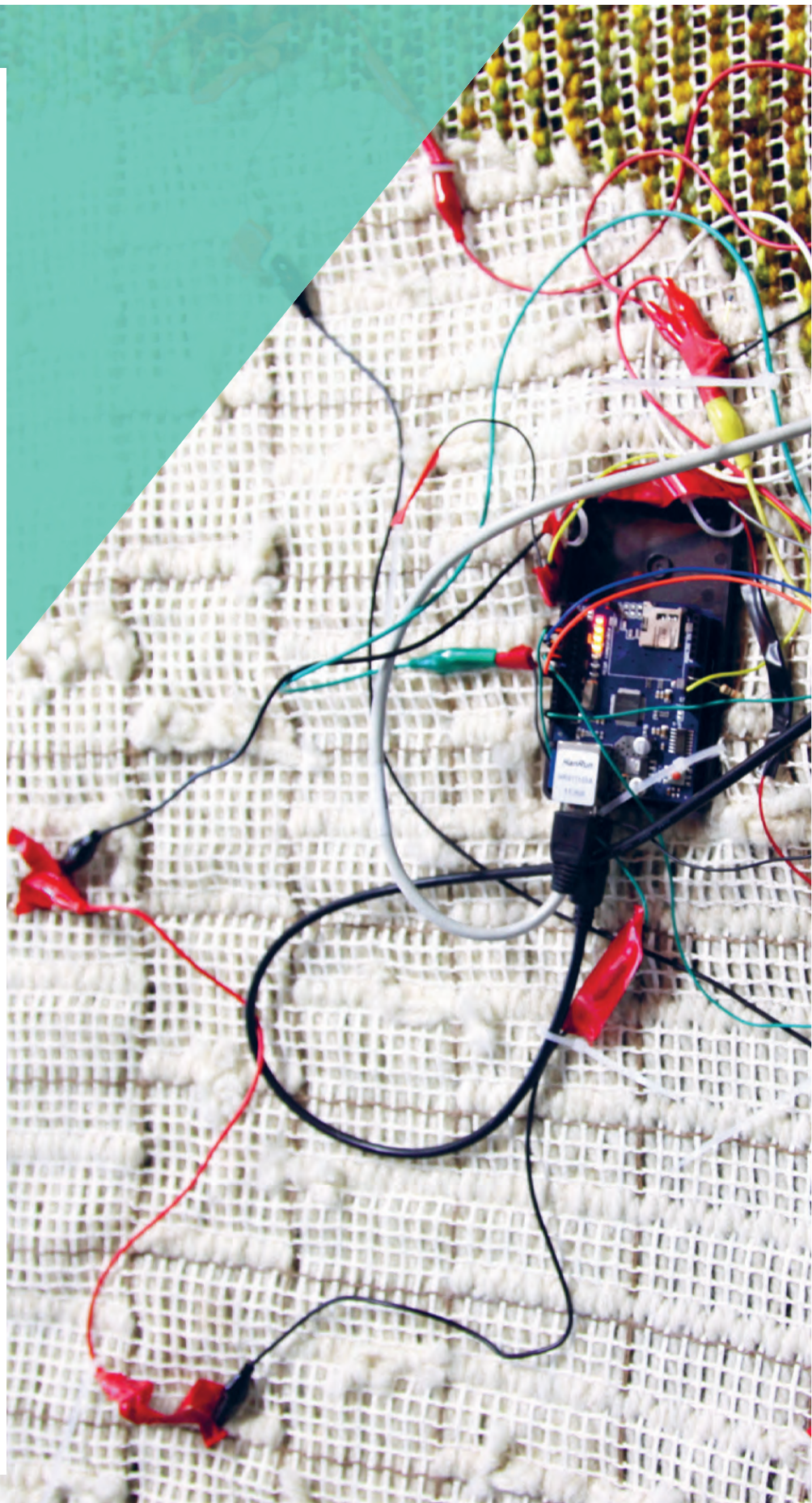
Earlier in the autumn, **Kimmo Pernu**, an innovation architect at Suunto, presented his thoughts about the future of wearable computers, e-textiles and smart clothing design from the industry perspective.

In addition, TextIL organised several workshops, *Introduction to Textile Lighting* and *Textile Thinking for Electronics*, which combined electronics and textiles through prototyping with different materials, such as conductive yarns and soft sensors.

COLLABORATIVE PARTNERS

Ramyah Gowrishankar and Raija Jokinen, Aalto ARTS | Pirjo Kääriäinen and Jussi Mikkonen, Aalto ARTS, Department of Design | Mikael Studers and Peter Tapio, ElectroShop, Aalto Design Factory | Textile Interaction Lab | Embodied Interaction Lab | Aalto Media Factory

GET BLOGGED
textileintlab.wordpress.com



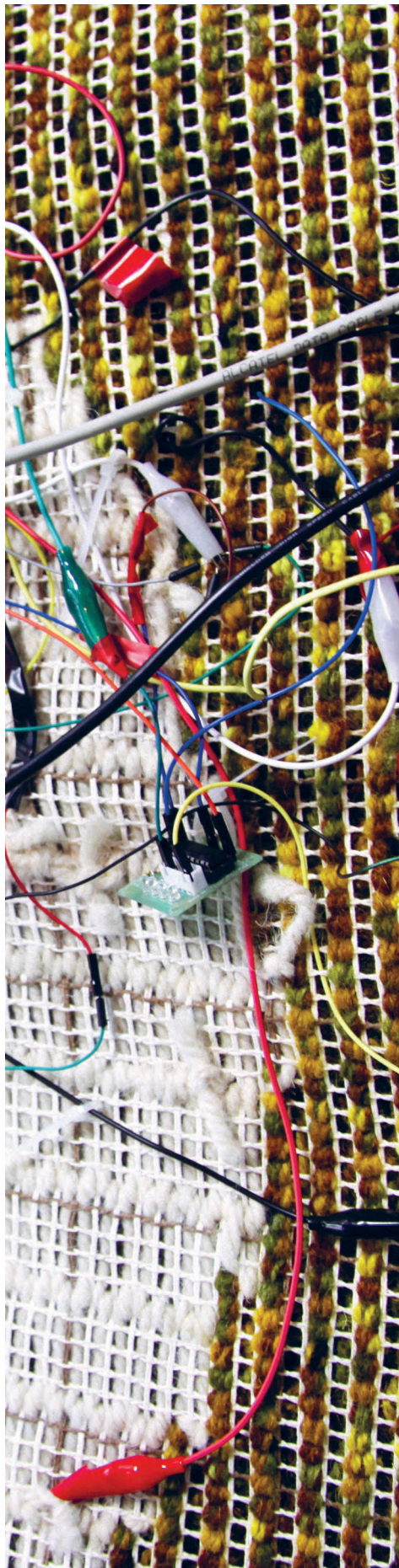


IMAGE: LEENA NÄREKANGAS

Hello, FabLab: Digital Workshop Basics

*Learn the basics of using
the FabLab machines
with the Digital
Workshop Basics course
at Aalto FabLab!*

The Digital Workshop Basics course helps to overcome the initial hurdles to manufacturing digital designs with the FabLab machines.

This term students did basic design exercises; the designs were then manufactured with the machines and also documented by them. The documentation served as a personal manual for later use in the lab as well as a record of the student's participation in the *Digital Fabrication Studio* course.

The emphasis of the course is on practical work: rather than lectures, students engage in hands-on work with software and digital manufacturing machines.

The course is offered as part of the curriculum for the Department of Media Master's degree programme. Additionally, students from other departments and Aalto schools can also sign up through internal transference.

The Digital Workshop Basics course has been arranged each term since spring 2012, and it will start again in autumn 2013.

MORE ABOUT BASICS
noppa.aalto.fi > course 2543
anu.maatta@aalto.fi

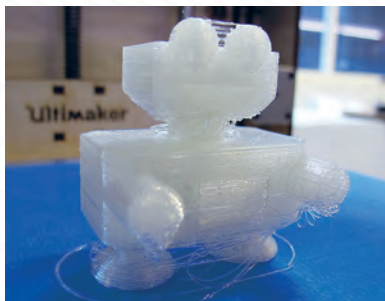


IMAGE: AALTO FABLAB

MAR CH 2013

> HIGHLIGHTS

> **Media
presentation skills**
course for Aalto
professors



IMAGE: KARI-HANS KOMMONEN

> **Guests from Tokyo
at AMF**

> **AMF Gallery**

>> **Aalto on the Move.** Photographs
by Timo Idänheimo, Tuure Laurinolli.
Videos by Anna Berg, Dimitri Pailles,
Johannes Söderström

Internet of Things

The Internet of Things is just about to surf into our everyday lives. The lecture series opened up designers' eyes to seeing the possibilities for developing the next generation of products and services.

We already have robotic vacuum cleaners, autonomous quad copters, self-driving cars, programmable legos and Nike fuel bands. There are smart city projects that explore how we can use new, connected technology to build a better life.

The Internet of Things is currently a hot topic in the media, and it also has created a burgeoning start-up community around itself. However, the topic is not new: it has been discussed and developed for years, and in some respects, it is already very much around us — embedded in the fabric that makes up cities, buildings and smart products. Now it is finding its way into our everyday lives and conversations.

Many examples of the Internet of Things are often complex and even in-

timidating to a general audience. Some applications are specifically designed for the military or for some sort of surveillance. But products such as the learning thermostat Nest, and the Little Printer by Berg are changing the perception of embedded technology and are great demonstrations of how this technology can be used for everyday products.

Miniaturisation, open standards and cloud-based platforms offer exciting opportunities for how embedded technology can be used. There are now tools to create products and services that are interconnected, that are autonomous and that can interact with other devices in unexpected ways. This is a space where we will most likely see radical innovations that have the capacity to change our behaviour towards technology.

However, to some extent designers have been missing from the conversation. The *Internet of Things* lecture series aimed to open up designers' eyes to the versatile capabilities of radical embedded technology.

STRUCK BY A THING?
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MARCH

Nokia 3DK Hacking

Seven different phone covers for Nokia Lumia 820 were designed by multidisciplinary teams in an intensive workshop at FabLab.

Nokia recently open-sourced 3D data for the Nokia Lumia 820 phone cover, called 3DK, which allows people to modify their covers and share great ideas.

The two-day workshop, organised by **Michihito Mizutani** and **Anu Määttä**, facilitated the use of 3D printers so that people could innovate new covers with for Nokia Lumia 820. There were many participants in the workshop, ranging from art students to business consultants.

There was an online photo stream during the hackathon, and all of the ideas that were generated, including 3D data and short videos, were shared with an open-source community.

The workshop also hosted a competition where ideas could be voted on by

anyone on the Internet. During the workshop, four multidisciplinary teams were formed and they generated seven working covers for the competition — in just two days. The competition motivated all of the participants — from art students to business consultants — to engage in design thinking with a business mindset.

The workshop received very positive feedback from the public as well as from professionals from the Nokia Corporation. As a result, Nokia's official blog published an article about the workshop. More 3DK covers from other product lines, such as the Lumia 520, are now being open-sourced, so the workshop can be expanded through the global FabLab network in the near future.

COLLABORATIVE PARTNERS

Nokia | Aalto FabLab | Aalto Media Factory

WANT TO DIY?

fablab.aalto.fi



APR IL 2013

> HIGHLIGHTS

> AMF Gallery

>> In Spaces. Photographs by
Susana Rojas

Faux explored new dimensions of being human

The Wearable Electronics course at Aalto Media Factory inspired Alpo Aaltokoski to choreograph a dance performance that combines artificial parts, electronics and the human body.

The first steps towards planning the performance, called Faux, were taken in 2011 when **Laura Haapakangas** (costume design), **Timo Muurinen** (media artist/sound design) and **Alpo Aaltokoski** (choreography) participated in the *Wearable Electronics* course and made a project called *The Performance Garment*. The team became interested in studying wearable electronics and how it can possibly be applied in the performing arts.

The costume design for Faux moved from everyday realism to surrealism and

playfully looked for new dimensions for being human. It experimented with how virtual reality and electronics could become forms of social interaction in the future alongside non-verbal and kinesthetic forms of communication.

“For the team, the creative process of Faux raised questions about the evolution of different types of humans. Technological aids and machines, such as pacemakers, breathing machines, dialysis machines, have helped people live longer and today they are regarded as being as commonplace as organ transplants. Thanks to advances in science, spare parts can now be grown for people and stem cells can be printed in 3-D,” claims **Janne Ikäheimo**, the producer of Faux and the managing director of Alpo Aaltokoski Company.

The premiere of **Faux** took place at Lume Studio in Helsinki in April.

COLLABORATIVE PARTNERS

Aalto Media Factory | Suomen Ortotiikka & Protetiikka, a Finnish medical rehabilitation company | Alpo Aaltokoski Company

CREATIVE TEAM

Choreography: Alpo Aaltokoski | *Costume and set design:* Laura Haapakangas | *Assistant to costume designer:* Timo Varamäki | *Realisation of artificial parts:* Markku Salminen, Aki Aalto, Alekski Aalto, Ville Saari | *Sound design and composition:* Timo Muurinen | *Electronics for costumes:* Timo Muurinen, Aki Päivärinne | *Light design:* Ville Mäkelä | *Photography:* Sanna Käsmä, Mikko Raskinen | *Production:* Janne Ikäheimo, Helmi Saksala





MAY 2013

> HIGHLIGHTS

> Aalto Snapshots premiered

> Preparing the workshop with **Kino Šiška** continues

>> A public workshop/hackathon utilising the Aalto Window platform that makes a multitouch multiscreen possible

> Energy Hackathon

>> Researchers, designers, coders, journalists and open knowledge activists got together to develop ideas that utilize energy data.

> The **Parsons-Aalto Visualizing Finance Student Competition** reaches its climax

>> Awarded presentations simultaneously exhibited at Aalto University and in Parson-Paris

> AMF Gallery

>> #MAT1236. Photographs by Greek civilian activists

MAY

Warehouse Tech

The pilot project of the new Art and Technology minor subject programme encouraged students to cross over traditional boundaries; it culminated in an exhibition.

The emphasis of the *Art and Technology* study programme is on interactive artworks that are spatial, embodied or mobile. The topic areas include interactive installations, experimental user interfaces, wearable electronics and ubiquitous technology. The programme combines media artistic thinking and praxis with the aesthetic and philosophical foundations of the field.

Projects by students participating in the *Art and Technology* programme's *Media Art Installation* course were showcased in the *Warehouse Tech* exhibition in Helsinki.

The course, led by media artists **Andy Best** and **Matti Niinimäki**, ran for the whole academic year and included students from Aalto SCI (Media Technology) and Aalto ARTS (Media, Art). The

students had already presented group projects in a small exhibition called *Altered States* at the Arabia campus. During the spring, they worked, for the most part individually, on more ambitious projects that combined their artistic and technical skills.

A wide variety of working methods were used, such as a study of 'fugly' phenomena on the Internet, and recording data from the everyday movements of various species and machines to EEG brain scans controlling non-newtonian liquids, and a robotic drawing machine controlled by personal activity data.

COLLABORATIVE PARTNERS AT AALTO
Department of Art | Department of Design |
Department of Media | Department of Media
Technology | Aalto Media Factory | Aalto
Design Factory

SEE AND BE AMAZED!
artandtech.aalto.fi

The programme combines media artistic thinking and praxis.





IMAGES: ANNA BERG



UP COM ING 2013

**A! AALTO
MEDIA FACTORY**
mediafactory.aalto.fi

Robotic workshop for the kids



IMAGES: ©2013 KÄSITYÖKOULU ROBOTTI



Games Now!

The game industry is growing and the ways in which people play games are rapidly expanding. It is time to take a deep look at the latest developments — and at the future as well.

The Games Now! course will handle the hot topics and trends in the game industry. The aim is to offer a wide and multi-disciplinary array of game-related topics that will give food for thought for all who are interested in games and making them.

The course will bring together students and industry professionals in lectures and workshops. The idea is to keep a bit of distance from the regular hype topics, and rather, to look behind them and dig deeper into the hows and whys: the course will provide seeds for thought that will benefit game makers for a long time to come — not just for the next seasonal trend.

READ MORE
mediafactory.aalto.fi > Funding and projects

The gaming industry is growing faster than ever, but there is also a myriad of changes affecting the scene.