

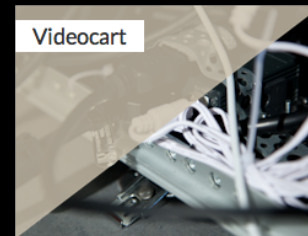
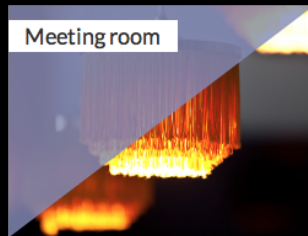
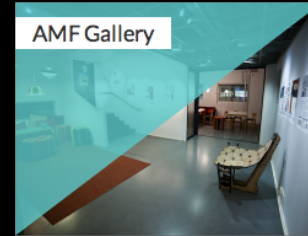
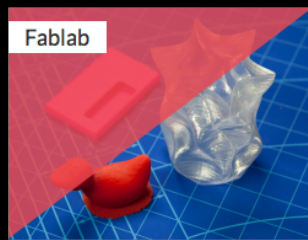
# A! AALTO MEDIA FACTORY

**Ali Neissi**

**Fablab Con  
Europe 2013**

# Contents

- Aalto MediaFactory
- Aalto Fablab
- Introducing Electronics Studio
- Electronics for the Artists



[mediafactory.aalto.fi](https://mediafactory.aalto.fi)

# AV production and services

## Productions

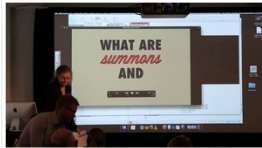
### Recently Uploaded



Timo-Erkki Heino: More Money to US Rich...  
1 month ago



Visualizing history & data visualization at ...  
1 month ago



Confusion & loss: The dual roles of emoti...  
1 month ago



A multimodal semiotic approach to repres...  
1 month ago

### Recently Followed



Media Lab Helsi...  
4 months ago



Juha Kronqvist  
4 months ago



Pila Rusjan  
4 months ago



Video Marsh  
7 months ago



kisoan Eom  
11 months ago

120 videos

## Edit and camera



1. Still cameras: Nikon, Canon and Sony with lens sets
2. Video camera: 2 Sony + high speed camera
3. Lights, stands etc.
4. Two edit units

## Video cart set



1. two cameras
2. camera AC adaptors;
3. laptop, headphones;
4. HDMI cables;
5. microphone holders;
6. shotgun microphones
7. cables etc.



# Web Studio

## Consulting with students and staff on web development and problems

Platforms and gadget: Galaxy, LG Optimus, Windows XP (2006-2007, 2008 and 2009), Windows 7 (2010), Mac OS X 10.7, iPad 1, Galaxy Tab, Lumia 800, Nokia N97, iPod Touch, Kubuntu, Ubuntu...

A bookshelf full of books on user experience, interaction design, information design, web development and related things



# Aalto Fablab

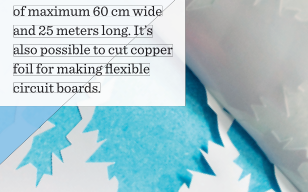
## 3D Printers

The Ultimaker is a low cost open source do-it-yourself 3D-printer using the Fused Filament Fabrication (FFF) technology with thermoplastic extrusion. It's a great tool to make fast 3D prototypes out of plastic in various colors.



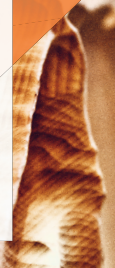
## Vinyl Cutter

With the vinyl cutter you can create stickers of maximum 60 cm wide and 25 meters long. It's also possible to cut copper foil for making flexible circuit boards.



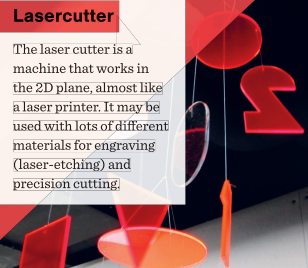
## Milling Machines

Roland Modela MDX-20 is used for precision 3D milling and 3D scanning as well as for making printed circuit boards (PCBs). Large scale CNC is used for making furniture-sized objects as well as milling larger shapes with 3 axes.



## Laser Cutter

The laser cutter is a machine that works in the 2D plane, almost like a laser printer. It may be used with lots of different materials for engraving (laser-etching) and precision cutting.



## Projects

FabLabs are about sharing what you make. See projects made at Aalto Fablab, and welcome to make your own!

MORE INFORMATION:  
[fablab.aalto.fi/site/projects](http://fablab.aalto.fi/site/projects)  
[fablab.aalto](http://fablab.aalto)



## Electronics Studio

Electronics Studio will help you with electronics prototyping. You can make your PCB, solder your components and test your circuits. You are welcome to use the lab and to attend the Electronics for Artists course.



# Aalto Fablab

- Staff
- Opening hours
  - Open day on Tuesdays
  - Aalto days
- Charging policies

# Electronics Studio

- 3 Electronics tables
  - Power supply
  - Oscilloscope
  - Signal generator
  - Logic analyzer
  - PCB making facilities
  - Soldering stations
  - Microscope
  - Shelves of components
  - Books
-

# Strategy in Electronics Studio

- Pop in, explore and ask for consultancy
- Lending components and boards
- No charge for use
- Charges for components with total cost of more than 5 euros

# Education



Media Factory helps Aalto University departments create new innovative learning opportunities within the media context.



Course:  
Art and Tech “the Bat  
Helmet”

# Electronics Education in Fablabs

- Arduino Workshop in Timelab and BUDA::Lab
- Arduino physical computing in Relab
- Introduction to computer arts and electronics in Brighton fablab
- Physical Computing and Arduino workshop fabMTIC

# Electronics for the Artists

- Why is it needed?
  - Aalto Fablab Location
  - Artists and Designers
  - Electronics in art and design projects



# Electronics for the Artists

- What do the artists and the designers need?
  - Physical Computing
  - Interaction Design

# Electronics for the Artists

- Short sessions each focusing on one topic
- At lunch time
- No credits
- No registration
- No charge
- Open for everybody

# The Course Structure

- Definitions
    - Voltage
    - Current
  - Equipment
  - Prototyping
  - Microcontrollers
    - Arduino
    - Teensy
-

# The Course Structure (continue)

- Input/output
  - Digital
  - Analogue
- Communications
  - Serial
  - SPI
  - I2C
  - Wireless

# The Course Structure (continue)

- Board Design
  - Eaglecad
- PCB
  - Etching
  - Milling
- Assembly
- Test and Debug

# Conclusion

- Positive Feedbacks
- Visual
- Audio

# Future Plans

- Developing the course further
- Connection with high schools
- More programming

Thank You!