



Photographs: LilyPad Arduino tutorial by Leah Buechley.

CREATING TECHNOLOGIES CONFERENCE

Friday 5th June 2009

AUT University Conference Centre, Auckland City

CoLab is proud to present 'Creating Technologies' – a one day conference exploring empowerment and engagement through technology.

Overview

Our keynote speaker is Dr Leah Buechley director of the High-Low Tech research group at the MIT (Massachusetts Institute of Technology) Media Lab. The High-Low Tech group explores the integration of technology from cultural, material, and practical perspectives, with the goal of engaging diverse groups of people in developing their own technologies. Leah is a well-known expert in the field of electronic textiles (e-textiles) and she developed a method for creating cloth printed circuit boards (fabric PCBs) and designing the commercially available LilyPad Arduino toolkit. Her research has been featured in The New York Times, Boston Globe, Popular Science, CRAFT Magazine and academic publications.

The conference program also include some of New Zealand's top industry experts, creative artists, technologists and foremost thinkers. They will explore issues and themes of technology and empowerment, including the democratization of technology, new models for participation, creativity and business, technology and gender and e-textiles.

Please see the attached speaker bios and the CoLab website <http://www.colab.org.nz>.

Programme

09.00 Welcome and introduction:
Associate Professor Frances Joseph

- 09.10 Key Note Speaker: Dr Leah Buechley 'Democratisation and empowerment'
- 09.40 Julien Priest 'Terra Firmware'
- 10.00 Associate Professor Charles Walker 'Cloudcuckooland: The Institutionalisation of Creativity'
- 10.30 *Morning tea*
- 10.50 Derek Elley – Ponoko 'Reinventing how goods are designed, made and distributed'
- 11.10 Evren Uzer and Otto Von Busch – Roomservices 'New Cartographies for Transversal Ecologies'
- 11.30 Dr Dave Parry 'Intersecting the digital and physical - Cheap and ubiquitous digital awareness via RFID'
- 11.50 Tim Carr – Mindkits and Robotics
- 12.10 *Lunch*
- 12.45 Dr Leah Buechley - 'Making Technologies'
- 13.15 Lyle Riley 'Project development for City Centered Cycling Jacket'
- 13.35 Kim Newall – 'Pixels and Pencils'
- 14.00 *Afternoon tea*
- 14.20 Dr Roy Davies 'Participatory Design using Mixed Reality, Pedagogical Drama and Democratic Meetings'
- 14.50 Zephyr Technology
- 15.10 Dr Aukje Thomassen 'Play - as a means for social innovation through design actualization'
- 15.30 Dr John Collins 'Democratisation of Engineering – a personal perspective'
- 15.50 Panel discussion and summary chaired by Associate Professor Mark Jackson

ARDUINO LILYPAD WORKSHOP DR LEAH BUECHLEY

Thursday 4th June & Wednesday 10th June 2009
IDU Laboratory, AUT University, Auckland City

Dr Leah Buechley will be hosting one day workshops on Arduino LilyPad.

Prerequisites

Enrolments for these workshops will be accepted from those who have previous skills with Arduino. Places are limited and will be allocated on a first come, first served basis.

You will need to bring something to decorate like a handbag, shirt, pair of jeans etc.

Electronic Fashion

Learn how to build a shirt that sings when you're squeezed, a purse that sounds an alarm when someone touches it, or

a jacket that shines and sparkles at your command. This workshop will guide you through the process of building an interactive garment that incorporates touch sensors, light, and sound. During the workshop you will learn how to use the LilyPad Arduino toolkit to design, build, and program your own soft electronic fashion. You'll play with sewable computers, conductive fabric, conductive thread, LEDs, and speakers. You'll be introduced to the Arduino programming environment and be guided through the process of designing an interactive garment, building it, and writing programs to control it. The workshop will also provide you with support to continue your exploration in this area, including information about where to purchase supplies, where to get help, and how to wash and care for garments.

Registration

Please email dawn.hutchesson@aut.ac.nz, fax completed form to (09) 921 9916, or call Dawn on (09) 921 9566

