The CITRIS Invention Lab supports faculty, student and community innovation by providing the knowledge, tools and support to rapidly design and prototype novel interactive products, embedded sensing systems and integrated mobile devices. The new facility will be a vital piece of the CITRIS pipeline running from the minds of researchers through CITRIS laboratories, and into the markets, industries, and streets of the world.

The 1,700 ft² Invention Lab is located on the first floor of Sutardja Dai Hall at UC Berkeley and supports 3 major functions:

1. **Learn**: Faculty teach Engineering and New Media courses on interactive product design and prototyping.

2. **Build**: The lab offers a full suite of tools, technical support and fabrication services for creating functional prototypes.

3. **Launch**: The lab promotes turning concepts and ideas into new ventures by offering work space for the Foundry business incubator.

The Invention Lab offers a variety of prototyping equipment ranging from basic craft tools to electronics workbenches, CAD stations and professional digital fabrication machines. Key equipment includes a Universal VLS3.50 laser cutter and a Projet HD 3000 high-resolution 3D printer. Common prototyping materials and supplies are available for purchase in the lab. Lab staff provides additional guidance and support for design and equipment use.

Together, these assets have already helped students turn ideas such as cloud-based car diagnostic devices, smart hydration tracking cups and phone-controlled irrigation systems into functional prototypes.
FACULTY AND CLASSES

- CS294-84: Interactive Device Design
- Advanced Interactive Devices & Digital Fabrication
  Professors Bjoern Hartmann & Paul Wright
- NM290: Critical Making:
  Materials Protocols & Culture
  Professor Eric Paulos

The Invention Lab is one part of the CITRIS invention ecosystem, which also includes:

The Marvell Nanofabrication Laboratory, which provides access to thin-film deposition, etching tools, photolithography, pattern transfer, and doping tools in class 100 and class 1000 cleanroom facilities. Marvell helps researchers make prototypes of new devices at the micro and nano scales. Together with Invention Lab, they will be more than parallel institutions: nano-chips, MEMS, smart materials, and other tiny devices developed in Marvell will themselves become components of larger devices developed at the Invention Lab.

The Social Apps Lab @CITRIS Berkeley, which focuses on the potential of cell phones and other mobile locative media to harness the participatory energies of game-play to address social issues. The two labs will collaborate on user interface and gaming strategies to encourage use and integration of devices and services.

“Our mission is to usher the best IT and engineering ideas into the real world where they can make a difference for the better. We want to see a strong California economy, but we also want to see the evolution of excellent devices that promote human dignity, make cities work better, restore and strengthen health, preserve the environment, and bring people closer to each other and to the nature of the world they live in.”

Paul K. Wright
Director, CITRIS and the Banatao Institute @ CITRIS Berkeley

To learn more, please contact:
Bjoern Hartmann, PhD
Assistant Professor
Electrical Engineering and Computer Sciences
bjoe@eecs.berkeley.edu

http://inventionlab.org

To learn more, please contact:
Bjoern Hartmann, PhD
Assistant Professor
Electrical Engineering and Computer Sciences
bjoe@eecs.berkeley.edu

http://inventionlab.org