EE150 – Fall 2015
Digital Ventures Design 2.0

Course Description

Digital media, commerce, gaming, socialization and productivity solutions are now essential components of people's lives. There are many intriguing success and failure stories in new digital service ventures. The curiosity though remains as how they did it?! This course aims to offer the scientific foundations of analysis, design, development and operation of innovative digital services and to shed light on the elements of their success and failure. The course also provides an experience of combined team-based design, engineering, and entrepreneurship.

The course material will be covered through lectures by instructor and invited speakers, in class activities, readings, and a group project. Throughout the term students will work within an interdisciplinary team of their peers to conceive an innovative digital service concept and produce a business model/plan and a working prototype. Ongoing design critiques are provided by class members and industry invitees. The course project outcomes will be showcased in a final event with participants from the campus and the investment community.

Term Project: In Fall 2015, the projects will focus on the emerging "Internet Of Things".

Contact Information

Instructor: Farshad Lahouti   Email: lahouti@caltech.edu   Office: Moore Lab 116C

Schedule

MWF

Course Topics

- Fundamentals of digital services industries and IoT
- Understanding the customer and user-oriented design
- Creating an innovative and successful service offering (product): value creation, technology enablers, needs assessment, designing services
- Understanding technology platform characteristics and technical requirements including security, privacy, dependability and scalability
- Deployment and launch of services, business models, promotion
- Feedback and improvement, data analysis and business intelligence, role of social media and crowdsourcing