



Caltech

EE/CS147 – Fall 2016 Digital Ventures Design “IoT and Data” Edition

Course Description

This course aims to offer the scientific foundations of analysis, design, development, and launching of innovative digital products and study elements of their success and failure. It provides students with an opportunity to experience combined team-based design, engineering, and entrepreneurship.

The lectures, and invited speakers, present a disciplined step-by-step approach to develop new ventures based on technological innovation in this space.

Throughout the term students will work within an interdisciplinary team of their peers to conceive an innovative digital product concept and produce a business plan and a working prototype. The course project culminates in a public presentation and a final report.

Term Project: In Fall 2016, the projects will focus on the emerging Internet of Things and learning from the resulting massive data.

Contact Information

Instructor: Farshad Lahouti Email: lahouti@caltech.edu

Schedule

MWF 13:00~14:30, lectures and student feedback sessions

Course Topics

- Fundamentals of the emerging Internet of Things and Data business
- Understanding the user-oriented design
- Creating an innovative product offering
- Technology enablers and requirements
- Value proposition and core competency
- Business models, unit economics and viability
- Launch of services, promotion and product planning
- Feedback and improvement, data analysis and business intelligence

Resources

- Course website: <http://digitalventures.caltech.edu>