

HCI+DESIGN: USER INTERFACE DESIGN + PROTOTYPING + EVALUATION

Stanford CS: HCI+Design

CS 147 Overview

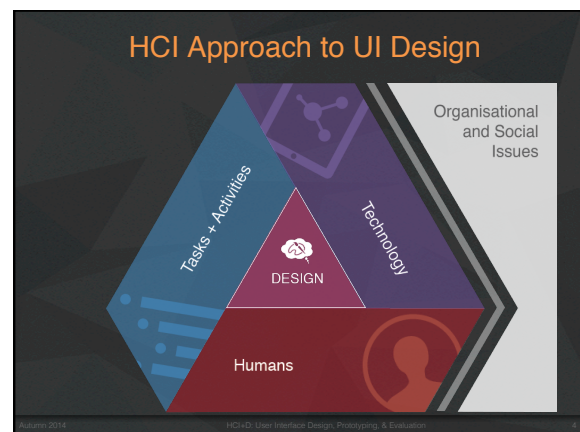
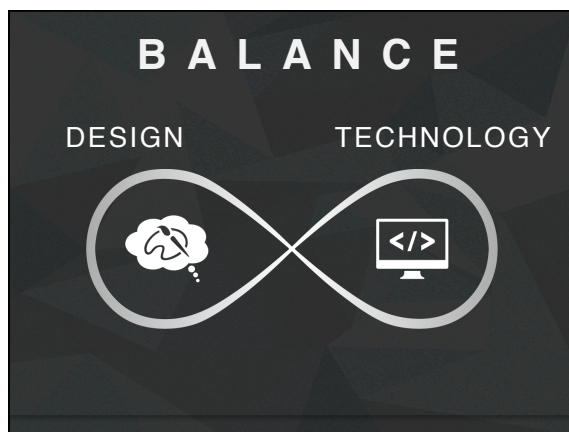
Prof. James A. Landay
Computer Science Department
Stanford University

Autumn 2014

Outline

- Course overview
- Project presentations
- Poster session/demos

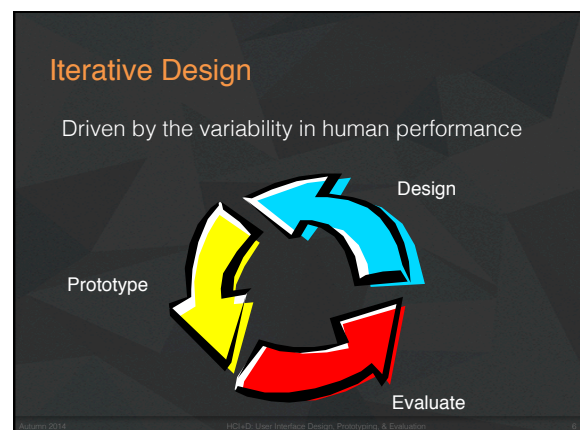
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Goals of CS 147

- Learn to design, prototype, & *evaluate* UIs
 - tasks & work practices of prospective users
 - cognitive/perceptual constraints affecting design
 - techniques for evaluating UI designs
 - importance of iterative design for usability
 - technology used to prototype UIs
- *how to work together as a team*
- *communicating results to a group*

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Project Based Course

- Iterative design of a real UI
- Theme: mobile computing
- **Quarter** long projects
- Students
 - 200 across CS, Symbolic Systems ...
- 54 Teams
 - 3-4 members
- 8 major group assignments
 - group work ~60% of course grade
- Four presentations
 - every team member presents

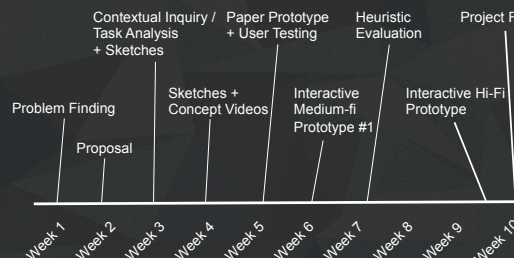


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Timeline



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Design Studios

- Each team attended small weekly studio (8-16 students/studio)
 - critique/feedback in more intimate environment
- Individual/studio assignments
 - Project proposal
 - Problem finding & research
 - Hall of Fame/Shame
 - Guerilla ideation
 - Heuristic evaluation

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User-centered Design: Fieldwork

- Contextual Inquiry & Task Analysis
 - observe existing work practices
 - make sure key questions answered



Tuned CI participant



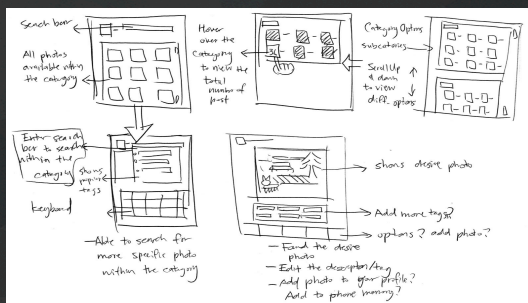
Tuned field work in record store

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Sketching & Storyboarding



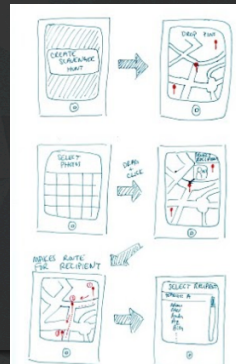
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Sketching & Storyboarding

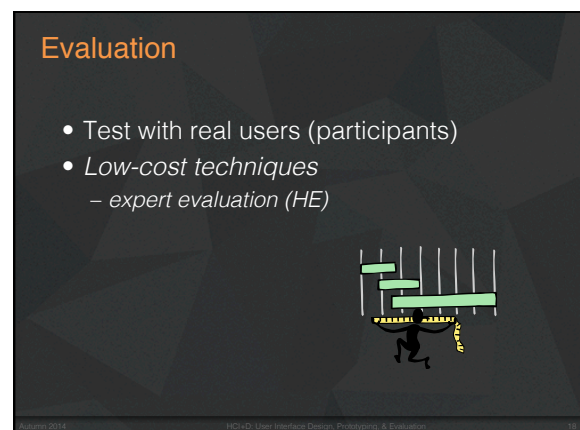
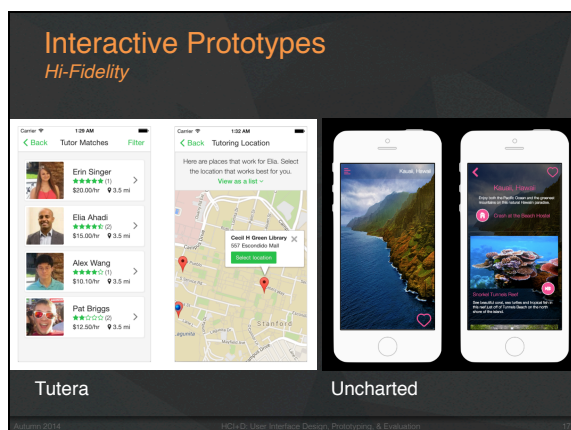
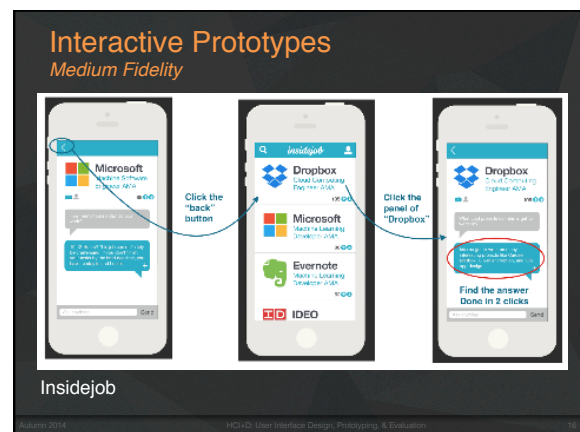
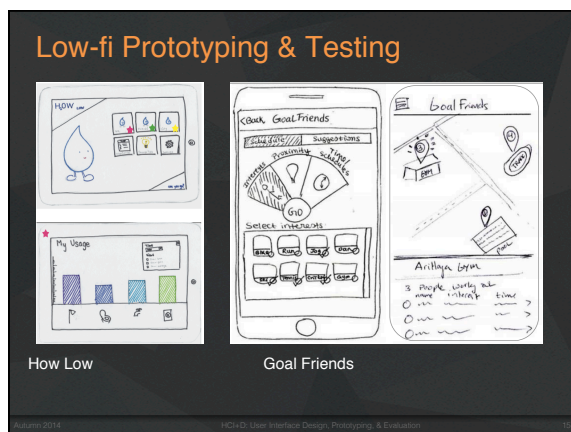
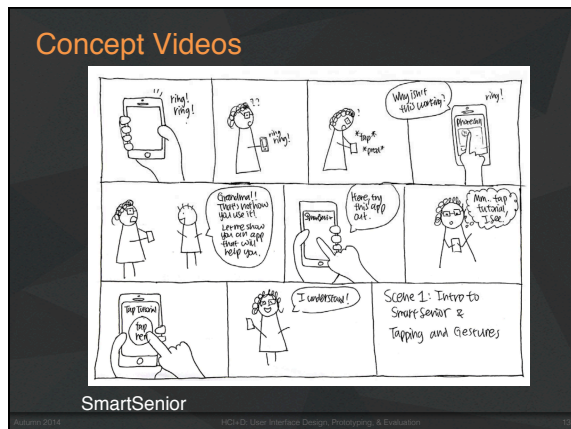


Parcel

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How CS 147 Fits into the Curriculum

- Most CS courses teach underlying technology
 - compilers, operating systems, databases, etc.
- CS 147 concerned w/ design & evaluation
 - technology is simply a tool to evaluate designs by prototyping
 - build skills that will be important upon graduation
 - design & evaluation
 - creating complex systems
 - working on large teams
 - communicating results

Goal: Make Stanford *the place* for interaction & design

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<http://cs147.stanford.edu>

- Project web sites w/ all materials
- Lecture topics, slides, & video
- Homework assignments

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The Projects

- 16 Judges will be picking the best projects (announced at 7:50 PM)
- You too will have a say by voting for *The People's Choice Award*

<http://bit.ly/cs147-people-choice>

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The Judges

- | | |
|---|------------------------------------|
| • John Tang, Microsoft Research | • Zhiwei Guan, Google |
| • Sunny Consolvo, Google | • Anoop Sinha |
| • Vivek Wadhwa, Stanford & Singularity University | • Susumu Harada |
| • Ravi Mhatre, Lightspeed Venture Partners | • Micah Laaker, Google |
| • Dan Maynes-Aminzade, Google | • Paul Fu, Alibaba |
| • Manu Kumar, K9 Ventures | • Dave Bags, Stanford d.School |
| • Shumin Zhai, Google Research | • Roberto Ortiz, Yahoo |
| • Terry Winograd, Stanford | • Scott Doorley, Stanford d.School |
| • Beverly Harrison, Yahoo | • James Cham, Bloomberg Beta |
| | • Michael Bernstein, Stanford |
| | • Chen Zhao, Alibaba.com |

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Thanks! Get Involved!

- Team mentors in CS 194H (Winter Quarter)
- Co-teach Stanford HCI/Design courses
 - studio faculty in CS 247 (Winter Quarter)
 - Engelbart Legacy course in d.School (Spring)
- Hire students and interns
- Support HCI+Design research at Stanford

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The Projects

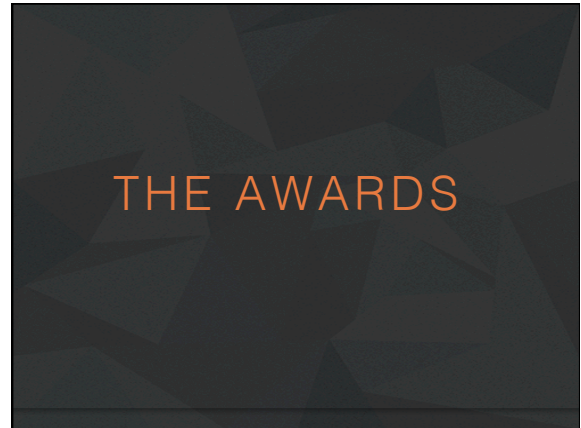
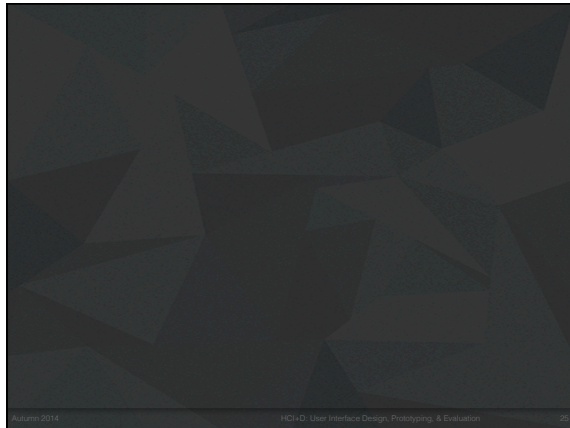
The People's Choice Award

<http://bit.ly/cs147-people-choice>

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Best in Each Theme

| | |
|---|--|
| • Behavior Change 1 Runner Up: TutorNow Winner: SpringBoard | • Discovery Runner Up: UnCharted Winner: Huddle |
| • Behavior Change 2 Runner Up: FoodShed Winner: RightToVote | • Information Runner Up: PlateList Winner: Clarity |
| • Creation Runner Up: VirtualVenues Winner: Unguided | • Learning Runner Up: Tutura Winner: SmartSenior |
| • Crowd Power Runner Up: Musit Winner: Tongues | • Motivation Runner Up: FunPod Winner: PassItOn |

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Best Pitch

Runner Up

Math Outside The Box

The Winner

AdventureCraft

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Best Poster

Runner Up

Museit

The Winner

Usher

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Best Demo

Runner Up

PassItOn

The Winner

Huddle

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Best Startup Idea

Runner Up

Huddle

The Winner

UnGuided

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Biggest Moonshot

Runner Up

Civility

The Winner

VirtualVenues

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Biggest Social Impact

Runner Up

Clarity

The Winner

SpringBoard

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Best Design

Runner Up

SmartSenior

The Winner

PassItOn

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Most Creative

Runner Up

PassItOn

The Winner

Right To Vote

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The People's Choice

Runner Up

Token

The Winner

UnCharted

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