

Thoughtless Acts

Fulton Suri & IDEO (2000)

All those intuitive ways we adapt, exploit, and react to things in our environment; things we do without really thinking.



Malavika



Bryan



Parina



Sabine



Nancy



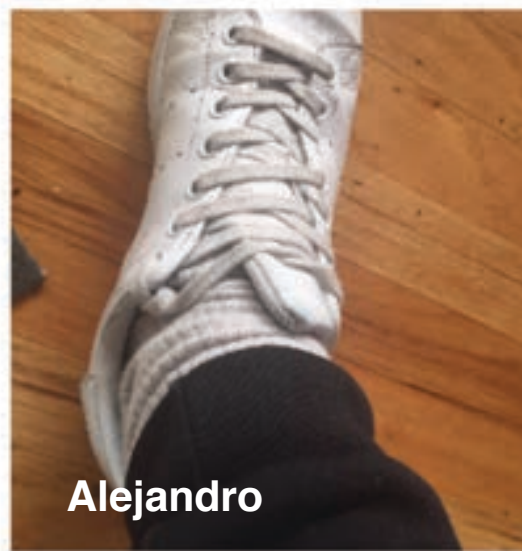
Christian



Jun



Conner



Alejandro





Varshine



Tobias



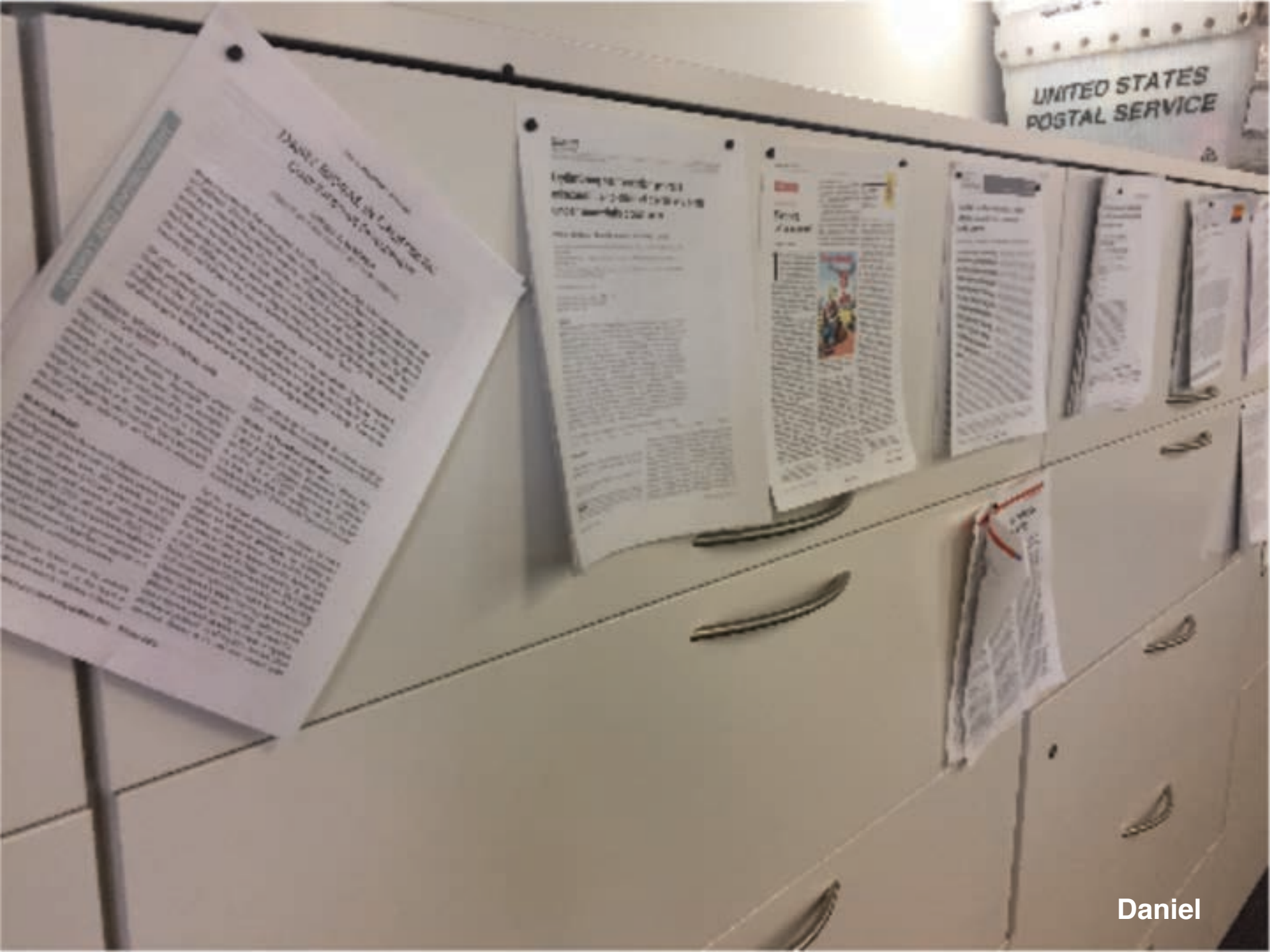


Peter



Gabe

UNITED STATES
POSTAL SERVICE



Daniel



Jin



Ada



Sun





Crystal



Joyce

Thoughtless Acts

Inviting Curiosity

“The key is looking carefully at what people actually do in various situations and asking ourselves questions to explain what we see: Why has someone placed this object here? What are those people doing and why are they grouped like that? Why is it that people apparently avoid being here? Curiosity will reveal **meaning behind these nonspectacular interactions** that take place around us all the time.”

Thoughtless Acts

Opportunities for Design

Everywhere we look there is evidence of people's creativity in reinterpreting and adapting things, improvising solutions to make up for something that's missing or poorly designed. We should look for patterns that point to a universal need. When we dig deep enough, behavior that might at first seem arbitrary, surprising, or idiosyncratic, usually has an insightful explanation.

	Monday LECTURE		Wednesday LAB	
Week 1			08/23	Introduction
Week 2	08/28	Activity Theory and HCI	08/30	Introduction to Physical Computing
Week 3	09/04	[Holiday]	09/06	Digital I/O with Arduino Boards
Week 4	09/11	Tangible Bits	09/13	Sensing 1: Potentiometers
Week 5	09/18	Taxonomy of TUIs	09/20	Sensing 2: Force sensors and photocells
Week 6	09/25	Calm Computing and Ambient Media	09/27	Serial Communication with Firmata & Processing
Week 7	10/02	Human Centered Design & Innovation	10/04	Output 1: Piezo speakers
Week 8	10/09	Midterm Project Review	10/11	Output 2: DC motors
Week 9	10/16	Midterm Project Review	10/18	Output 3: Servo motors
Week 10	10/23	VR and Mixed Reality	10/25	Output 4: Simple Mechanics
Week 11	10/30	Guest Lecture	11/01	Synthesis: Invent a music instrument (group work)
Week 12	11/06	Guest Lecture	11/08	Guest Lecture
Week 13	11/13	Final Project Progress Report and Critique	11/15	Final Project Progress Report and Critique
Week 14	11/20	Lecture by Noura Howell	11/22	[Holiday]
Week 15	11/27	Evaluating TUIs	11/29	Summary
Week 16	12/04	Final Project Exhibition Day 1	12/06	Final Project Exhibition Day 2

Final Project

You may expand your midterm project, or take a new approach. You may continue to work as a group (max 3 members) or as an individual. If you work in a group, be clear about each member's role in the project.

- An interactive prototype to be exhibited at the final course exhibition on **Dec 4th and Dec 6th**. Your prototype is to demonstrate your original idea for a Tangible User Interface to manipulate digital information, and
- A write-up due **Dec 15th, 2016** in the ACM HCI Archive Format (4-6pgs) <https://chi2018.acm.org/submission-formats.html>

Next Steps for Your Final Project

11/2 Thursday

Post your final project proposal on the course website.
Create a list of materials you need. (we may be able to help)

11/13 & 11/16

In-class final project progress report and critique.

12/4 & 12/6

Final project exhibition. Present your prototype.

12/15 Final write up due in the ACM SIGCHI archival format (4-6 pages)

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week 10



VR and Mixed Reality

What is VR good for?

- What were some of the surprisingly positive (or negative) experiences you had in VR?
- How might you enhance / modify it?
- Immersive? What is the difference between the experience in VR and the ultra high definition TV (or a big movie theater like IMAX)?
- Mixed reality vs. VR



Teaching Empathy with VR



Teaching Empathy with VR



Teaching Empathy with VR



Physicality and Virtuality

- Possibility to support social interaction between the VR user and the audience around the user?
 - How would they interact with each other?
- Possibility to seamlessly mix the virtual and physical worlds?
 - Tactile feedback? Any other type of controllers?
 - Ambient media on the floor, walls, etc.?













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Group Design Exercise

In the next 15 minutes, as a group:

- Pick a domain/context where you think VR might be uniquely suited for. Describe why VR would be good for this particular context.
- Pick one (or two) input/output space(s), e.g., shared output screens (floors & walls), head-mounted display, controllers, etc.
- Explore design opportunities to mix the interactions in VR and the physical space. For example, consider:
 - Interaction between multiple co-present users,
 - How might each medium, virtual and physical, uniquely contribute to the activity in the chosen domain?
 - Sketch your ideas on the white board.
- Present your design idea.
(3 minutes for each group's presentation)

Thanks and Q&A