Being Human | AI Design
ID-24ST-07 Advanced Design: Studio
Rhode Island School of Design, Fall 2016
Tuesday, Thursday 1:10-6:10 PM
Brian Kane, bk@briankane.net, 617-596-4897

This course explores the creative use of artificial intelligence and related intelligent systems in the context of user-centered design, object making, and human expression.

Hands on studio building and simulating intelligent artifacts and interactions with people to discover, explore, and push the boundaries of human/machine relationships. Students research the history, tools, and state of the art in technology and storytelling surrounding human and animal intelligence, learning, play, and interaction. Students design unique intelligent systems, build prototype experiences and test on real people.

Students gain a working knowledge of machine learning, market trends, UX design process, and cultural issues surrounding AI.

Artistic topics include ethics, machine creativity, social and emotional intelligence, value aligning, and ubiquitous presence. Issues of context and presentation will also be covered.

Coding is not required, but will be demonstrated and discussed. Students keep a design journal and drawing is required. Physical modelling of intelligent systems is encouraged.

A series of presentations from industry leaders will be included.

The first half of the semester consists of lectures, discussions, design thinking, and quick hands on assignments. The second half of the semester, students work on their own projects, either individually or in teams. Final projects can be physical, digital, or simulated, and need to be presented.

Grades: Your grade in this class will be based on your ability to assimilate the course materials, complete weekly assignments, and produce and present carefully considered works.

Evaluations are determined by the following criteria: constant willingness to be ambitious and take risks, regular participation in group critiques, consistent effort and work ethic, meeting deadlines, and attendance. Attendance is mandatory.

Tolerance and academic integrity: All participants are expected to treat one another in a respectful manner. The work produced for this class should also reflect that respect. Additionally, treat the studios with care and credit all source material properly.

Requirements:
Get a notebook for this class, keep notes, drawings, ideas.

Overview of course materials:
http://briankane.net/being-human/

Week 1
Thurs Sep 8
Intro: The 50,000 foot view of the ai market, trends, and technology
Hands on play with ai, physical interfaces and internet of things (http://samlabs.com)
Assignment 1

Week 2
Tues Sep 13
History of AI, with Laura Zittrain
Review assignment 1

Thurs Sep 15
The Marvin Minsky model, AI startups, with Bo Morgan
Assignment 2

Week 3
Tues Sep 20
Hands on play with api's
Review assignment 2

Thurs Sep 22
AI as art, with Matt Black
Emotional intelligence, creativity engine, ethics, labelling, backlash
Assignment 3

Week 4
Tues Sep 27
User centered design, user testing, and UX tools, mental models
Review assignment 3

Thurs Sep 29
Robotics, body hacking, microelectronics
Autonomous vehicles with Karl Iagnemma

Week 5
Tues Oct 4
Evolutionary algorithms, generative aesthetics, responsive/adaptive design
Assignment 4

Thurs Oct 6
Choreography, chance and choice
Field trip (?)

Week 6
Tues Oct 11
Design thinking, generating rapid concepts
Review assignment 4

Thurs Oct 13
Start rapid prototype

Week 7
Tues Oct 18
Smart objects, physical interfaces
Work on rapid prototypes

Thurs Oct 20
Present rapid prototypes

Week 8
Tues Oct 25
Research final project ideas

Thurs Nov 3
Research final project ideas

Week 9
Tues Nov 8
Review final project ideas

Thurs Nov 10
Work on final projects

Week 10
Tues Nov 15
Work on final projects

Thurs Nov 17
Work on final projects

Week 11
Tues Nov 29
Review final projects

Thurs Dec 1
Work on final projects

Week 12
Tues Nov 6
Work on final projects

Thurs Dec 8
Work on final projects

Week 13
Tues Dec 13
Work on final projects

Thurs Dec 15
Final crit