**HCI Notes**

Intro to HCI

* Professor: Scott McCrickard
* A big class – for entry to capstones earlier
* Textbook – author: Rex Hartson, title: UX Book
* Go through the UX Wheel – analysis, design, prototype, evaluation
* Cover content a mile wide and inch deep
  + Any class day/5 mins could be your entire career (if you pursue HCI)
  + Other classes delve deeper into specifics
* Shameless plug for Next Spring – HCI Capstone
  + Technology on trail focus
  + Design for not controlled lab settings
  + Tape computers to students and send them into wild
  + How do/can computers involve themselves in these settings in positive ways
  + Angle for science – citizens further science when out on the trail

Design of Info

* Professor: Steve Harrison
* School of information – what is it?
  + Our class – light condensed form
  + Content – as a way of thinking about how people are interacting with WWW
  + Focuses on providing structure to information
* In capstone, do not teach programming – instead teach what is the right thing to do, this class follows that model
* You write the spec - Which people you are going to design for, how you are going to design for them etc., it is up to you to choose – and then do it!
* Hidden Treasures Project - <http://tmela94.wixsite.com/mysite/hidden-treasures>
* For CS, it is essential to understand that people want and need
* Structure of the course
* Shameless Plug for Next spring – creative computing
  + Project based – in teams
  + ICAT Day – projects are showcase (can see what projects are like by visiting)
  + Start with set of ideas, get into groups, work towards project that is showcased at ICAT day
  + Essay is final examination – looking back at course, steps of projects, journal, reflection

Computer Graphics

* Professor: Gracanin
* Spring – grad class
* T, TH – 8 am
* Quote – “You cannot have great art without great paint”
* 1 - pain - Analogy for our class - You cannot have great computer graphics without great math
* 2 – prep - Also need to understand about graphic hardware and related libraries
* 3 – reward - Fun – gaming engines
* Theme of the class- computer graphics and internet of things
  + We interact with a lot of data these days! Use graphics to structure and appreciate
* Access to the CUBE
  + VR/AR, hololens
  + Collaboration with dubai if things go well
  + Visualize your projects in CUBE space
* Do not be fooled – this is not going to be about video gaming or whatever

GUI

* Professor: Luther
* Programming intense – complementary to McCrickards Intro to HCI
* This introduces the technical aspects of HCI
* Heavy focus on web interfaces and web development
* Should have strong skills in full stack dev and UI after take the class
* Some technologies: Backend, jscript, apache, DB, web frameworks, cloud hosting – public, crowd sourcing, connect your web to outside data from other sources
* Mostly talk about 2d graphics – SVG and html canavs
* Structure of course
  + Heavily project based, 6, build on each other
  + No quizzes tests
  + Design, sketch/draw, then frontend, backend, host, outside data, graphics, test
* Course theme –
  + Collab this past semester with history – WWII
  + But for fall - Promoting truth, preventing fake news and mis information
  + Lots of rooms for more specific ideas
* Luther will be teaching mostly remotely from Arlington
  + Flip classroom – demos and activities in class
* If want to see what is produced in the course – visit projects on ICAT day

HCI Capstone

* Professor: Tatar
* Will also teach Professionalism in the fall
* Capstone – project based, work in teams, engage in making to establish yourself out in the world
* Theme
  + Designing to change power and promoting equity
  + Probably seen these with FB and Uber, Companies with a lot of power
  + Social power – what is it, how does it interact with technology
  + Do machines have power?
* Examples

FB - Your year in review, picture of young girls face on father’s timeline who lost here that year

* + Equity – “I didn’t look for grief, FB is probably proud of work of year in review, my year was not great, not any part of the year I had could be great, this is a picture of my daughter who died this year”
  + Is this a one off mistake – or is this saying something deeper about a continual neglect?
  + There are other areas that hurt people, and I see this as problems of power
* CS response – design better things
* Class goals
  + Identify places where you can change power, can ethically do so, and build things!
* Class project Examples
  + Reformulate the context in which you see things
    - Crowd source FB new feeds so that it can compare and contrast what people say, different things about news
  + End user license agreements
    - No one likes agreements
    - Eulala – change power by make them an object of fun
    - Is your eula cheating?
    - Tower of eula – look at the distribution of words in the eula