H. DAVID ZHU

E: Human Centered Software Design and Development

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>EDUCATION

Franklin W. Olin College of Engineering
Class of 2016
Engineering: HC Software Design | GPA 3.80

University of North Texas
Fall 2010 - May 2012
Texas Academy of Math and Science | GPA 4.0

>EXPERIENCE

WORK

Sept. - Nov 2014
Contract Product Designer / Developer

Electronics and Product Design for Sports Training
Worked with a client to create an electronics device that detects a baseball student's performance during batting maneuvers. Responsible for circuit and physical design of a versatile product. Used Solidworks, Arduino, and circuit design software.

Summer 2013 - 2014
Microbiology Research Intern

Huang Lab at Olin College of Engineering
To understand how anaerobic bacterial communities function for things such as nitrogen fixation (plant food), I cultivated thousands of subcultures with LEDs under the direction of Professor Jean Huang, which I then analyzed through various computational bioinformatics methods.

ACADEMIC

Fall 2014
Team Member

Human Factors and Interface Design: Maven
(Team of 4) Created an interface for a webapp that brings together curious users with knowledgeable others to spark conversations through video. Researched users, built wireframes and paper prototypes, and created the functional prototype using AngularJS.

Fall 2014
Team Member

Mobile Prototyping: Save the Children India | Fall 2014
(Team of 3) Integrated Android communications with a Node server and a Mongo database. This app helps organizers at STC:India train volunteer tutors so that they are capable of teaching students in need.

Spring 2014
Team Member

User Oriented Collaborative Design: PuzzleGrounds
(Team of 5) Studied and designed for a user group that has strong interests in creating / solving mechanical puzzles. My main contributions included conducting multiple user research visits and interviews, systematic idea generation, and final proposal refinement and presentation.

Fall 2013
Team Member

Principles of Engineering: AutoSchematic
(Team of 4) Managed and designed an automatic wire stripper/cutter/bender that dispenses wires for pre-designed circuit schematics using Fritzing. Designed and created rapid prototypes of the physical product, producing a physical system students can use effectively.

OTHER

Current
Publicity Commissioner

SERV: Olin's Community Service Organization
Managing all external publicity for the community service organization. I design all adverts for volunteering events and make sure social media is punctually and successfully made.

>SKILLS

DESIGN
- User Research | 1.5YR
- Sketch Models / Prototyping | 1.5YR
- Illustrator | 1YR
- InDesign | 10MTH
- Photoshop | 7MTH
- Audio Production | 3YRS
- Video Production | 6MTH

SOFTWARE
- Javascript & Node.JS | 4 MTH
- HTML / CSS / JQuery | 2.5 YRS
- Python | 2YRS
- Java | 1YR
- Matlab | 7MTH
- R | 3MTH

MECHANICAL
- Solidworks | 1.5YRS
- Machining / Fabrication | 8MTH

OTHER
- Teaming | 3YRS
- Circuitry | 6MTH
- Mandarin Chinese | 7YRS