

NOURA HOWELL

EDUCATION

Olin College of Engineering

B.S. in Engineering with Computing
3.68 GPA, 2008 – 2012
team projects to learn
design, software, simulation, building

Mississippi State University

Gap year—pure math for fun
3.46 GPA, 2007 – 2008
graph theory, group theory, topology

SKILLS

Python
flask, jinja, django, mongoDB, SQL

JavaScript, HTML, CSS
AJAX, a little node, socket.io
backbone, a little angular
jQuery, bootstrap, underscore
D3, HTML5 Canvas, Web Audio API

git

Java, C, C++, MATLAB

human centered design process
user interviews, needs and values
personas, scenarios, requirements
interface design, mockups, prototypes
usability testing, pilot testing

music theory, clarinet

arduino, stepper motors
basic woodworking
machete with bamboo
simple sewing

CONTACT

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EXPERIENCE

MIT Media Lab

Boston, MA

Jul – Oct 2013

On a small collaborative research team, user studies, analyzing study results, interface design, and software development for WaaZam, a playful shared video environment for remote parent-child interaction (C++).

The Echo Nest

Boston, MA

Jul 2012 – Apr 2013

As one of two web devs at the company, full stack web development from UI design, AJAX, and interactive data visualizations to data analysis, computation parallelization, and databases for sales demos and management dashboards of tens of thousands of dynamically structured music objects (JavaScript, Python).

Accessible Mobile Phone

Rabat, Morocco

Sep 2011 – Jun 2012

As project manager on a team of four U.S. and three Moroccan students, mobile phone user research, human centered design, and entrepreneurship to enable working illiterate Moroccan adults to make phone calls independently.

Microsoft Windows 8

Redmond, WA

Jun – Aug 2011

As a program manager intern, owned and drove a showcase application from feature specification to user interface design to implementation to bug triage.

One Earth Designs

Xining, China

May – Jul 2011

As an engineering intern, computational modeling, field testing, and immersive user research of a durable, portable, affordable parabolic solar cooker for use in remote nomadic Tibetan regions of the Himalayas (MATLAB).

PROJECTS

Audiovisual Interactive Web Demos

2013

Audio processing, drawing, and custom controls for simple, playful wave visualizers and synthesizers. Chrome only: [Lissa](#), [Salad](#), [Dancey Dots](#) (JavaScript).

Digital Signal Processing Audio Effects

2011 – 2013

Real time audio effects, synthesizer components, and UI design (C++).

Task Board Website

Sep – Dec 2011

User research, personas, interface design, usability testing, implementation, and project management of a customizable reminders website.

Suggest Places to Go Android App

Jan – May 2011

Markov analysis of Foursquare checkins to recommend Yelp places (Java).

RESEARCH

Olin College Graph Theory Research

Jan – May 2012

L(2,1)-labeling and parallelizing labeling algorithms (Python) (publication).

Olin College Miller Fellowship

Jan – Aug 2009

Knot theory and Khovanov Homology.

North Carolina State University

May – Jul 2006

Analyzed new cotton stalk pretreatment for ethanol production (publication).