

# Dale Markowitz

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## EDUCATION

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### Princeton University

2011-2015

*AB in Computer Science*

Departmental GPA: 3.74, Total GPA: 3.6

Relevant Coursework: Artificial Intelligence, Operating Systems, Graph Theory, Reasoning about Computation, Algorithms and Data Structures, HCI Technology, Circuit Design

### University College London

Fall 2013

*Fall Semester Study Abroad*

Relevant Coursework: Distributed Systems and Security, Networked Systems

## RELEVANT EXPERIENCE

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### A Brain-Computer Interface for Sustained Visual Attention

2014-2015

*Senior Thesis with Kenneth Norman*

Using an wireless EEG headset, designed an system for online analysis of

### BeagleCache

Fall 2013, Summer 2014

*Fall/Summer Independent Work with Vivek Pai*

In order to increase bandwidth in developing world countries, created a network accelerator platform for the Beaglebone Black, a credit-card-sized Linux computer. Implemented HTTP caching as well as compressed HTTP data exchange between high and low bandwidth BeagleCache devices.

### SRON: A Software-Defined Overlay Network

Spring 2014

*Spring Independent Work with Jennifer Rexford*

Designed SRON, a dynamic SDN networking software written in Pyretic, in an attempt to allow Internet Service Providers better control over the paths their data takes through interdomain boundaries by creating an virtual overlay network on top of the physical Internet backbone.

### Floored Inc

Summer 2013

*Hardware Engineering Intern*

Built a high-resolution 3D scanner for reconstructing/modeling interior spaces using a precision laser rangefinder and DSLR camera mounted atop a rotating platform.

### Entrepreneurs Roundtable Accelerator

Summer 2012

*Design Intern*

Designed ERA infographic, brochures and marketing material.

## EXTRACURRICULAR ACTIVITIES

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### Princeton Makers Collective

2013-2015

#### *Programs Organizer*

Organized programs and events for the Princeton hacking and making group on campus. Brought in speakers from the hackspace NYC Resistor and the 3D printing company Shapeways to give presentations. Organized and taught a class on 3D modeling with OpenScad and Inkscape. Facilitated a collaboration between the Architecture Department and Makers Collective (access to supplies, organized beginners electronics classes).

### Princeton Women in Computer Science

2014-2015

#### *Peer Mentor*

Provided guidance and recommendations to underclassmen who are considering studying Computer Science.

### Orange Key Tours

Summer 2014

#### *Tour Guide*

Led tours of the Princeton campus, explaining the academic, extracurricular, and historic aspects of life as a student at Princeton.

### Keller Center Fellow

2014-2015

#### *Fellowship Grant Recipient*

With a grant from the Keller Center, an organization which promotes entrepreneurship on campus, I ran a workshop on creating USB devices with microcontrollers and novel sensors (foot pedals, light sensors, etc).

### Institute of Making at UCL

Fall 2013

#### *Active Member*

Member of University College London's MakerSpace, active use of 3D printers, laser cutter, soldering irons, etc.

### Hack Classes Instructor

2013

#### *Princeton Entrepreneurship Club*

Taught WordPress development class, helped organize iOS and Web development classes.

## PUBLICATIONS/PRESENTATIONS

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### BeagleCache: A Low-Cost, eMMC-Based Caching Proxy for the Developing World

2014

#### *Carnegie Mellon Undergraduate Conference in Information Systems*

Publication and presentation won "Most Promising Research".

### IoT Device Presentation

2013

#### *Fordham Eighth Law and Information Society symposium*

Created and presented an Internet of Things device at the Princeton/Fordham conference, "What Are Your Shoes Saying To Your Car? Assessing the Internet of Things." Designed a wireless, color-changing bedside lamp that, in conjunction with an iOS To-Do application, indicated how much of a To-Do List was completed.

## SKILLS

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<i>Software</i>	Linux (Arch, Ubuntu, Debian, Fedora) Python C Javascript/Node Java
<i>Electronics</i>	Eagle (Circuit Design) Arduino Soldering
<i>Design</i>	OpenScad (Parametric 3D modeling) Photoshop Inkscape