# PAUL KAPLAN

mobile: 551.580.9326 paul.kaplan.74@gmail.com 5464 S. Harper Ave. Chicago, Il

**PROFILE** 

Highly creative with a broad and heavily technical skill set in both hardware and software applications. A driven problem solver and passionate, self motivated worker. With an extremely interdisciplinary work history, experience working on mission critical systems and a broad range of technical skills, I excel where experimentation, innovation and creativity are key.

SKILLS

Web: Javascript (Node, Coffeescript, etc.), WebGL, HTML5, CSS3

Languages: Ruby, Rails, Python, C, Processing, Java

Programs: Adobe Photoshop, InDesign, Illustrator, Blender, Maya, AutoCAD

**EXPERIENCE** 

## Web Developer and Designer

Chicago, IL

James Franck Institute, University of Chicago

Autumn 2012 - Current

- Created an interactive, responsive event site using Jekyll with a Sinatra server to automatically serialize registrations and organize them in a shared Dropbox
- Designed all print material with Adobe InDesign, including posters and programs

## Developer, Tech Consultant

Chicago, IL

Student Government, University of Chicago

Autumn 2011 - Current

- Co-creator of a student marketplace site which gets over 25,000 views per week
- One of two developers on full stack project, from the server hardware choice to the front end design, focused on fast image upload pipeline with solid state drives

Research Assistant Chicago, IL

James Franck Institute, University of Chicago

Spring 2012 - Current

- Constructed a 'homemade' CT scanner out of an orthopedic x-ray, used to analyze aggregates of 3D printed particles from CUDA based GPU reconstructions.
- Created new method for tracking density changes via radiographic projections, saving hours over older volumetric tests and allowed analysis of local density flux
- Designed a webGL interface for visualizing 3D reconstructions using three.js

#### **Engineering Intern**

Berkeley, CA

Space Sciences Laboratory, UC Berkeley

Summer 2011

- Fabricated liquid nitrogen cooling system for balloon based particle detector, working on a three person team including the lead engineer and designer.
- Learned aluminum frame fabrication and design, working autonomously from designers CAD drawings to assemble radiator and cooling system

#### **Research Assistant**

New York City, NY

Department of Astrophysics, Columbia University

Summer 2010, 2011

- Created custom data acquisition setup with LABVIEW and Python to monitor and test high vacuum particle detector electronics
- Coded for mission critical x-ray beam line control system for testing calibration of high precision optics and flight system

**EDUCATION** 

# **University of Chicago** *Bachelor of Arts - Physics*

Chicago, IL

expected June 2013

- GPA: 3.65 / 4.00
- Experimented with broad course range, including visual arts, scenic design, advanced proof based calculus and analysis, philosophy and computer science

### **Awards and Grants**

• Dean's List 2010, 2011, 2012

- James Franck Institute/MRSEC Fellowship, 2012
- *Uncommon Fund* recipient, 2011: ScheduleSpy, a service that helps students get into classes they want by monitoring the University's course registrations website
- *Uncommon Fund* recipient, 2012: Data Visualization Lab, a project to build a homemade touch screen surface for interdisciplinary data visualizations

COMMUNITY

## hack@uchicago

Chicago, IL

Co-Founder

September 2011 - Present

- Created a University hackerspace with faculty in Computer Science where students can meet to collaborate and work on personal tech projects and ideas
- Hosts quarterly hackathons, weekend long tech building projects with prizes
- Focuses on spreading the hack spirit through teaching Ruby/Rails courses to students as well as local school outreach

**PERSONAL** 

I really enjoy outdoor activities like skiing, snowboarding, camping and running. Over this last summer I started swimming daily in Lake Michigan and completed my first triathlon. Put generally: exploring.