

# Paul Kiernan

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## EDUCATION

### CORNELL UNIVERSITY

#### BS IN ELECTRICAL AND COMPUTER ENGINEERING

May 2012 | Ithaca, NY

College of Engineering

Conc. in Electrical Engineering

Conc. in Computer Science

John McMullen Dean Scholar

Goldfarb Cornell Tradition Fellow

## LINKS

Github:// [paulkiernan](#)

LinkedIn:// [paulkiernan](#)

Twitter:// [@gaelic](#)

## COURSEWORK

Robot Learning

Operating Systems

Open Source Software Engineering

Unix Tools and Scripting

C ++ Programming

Computer Architecture

Digital Systems Design Using

Microcontrollers

Microelectronics

Embedded Systems

Computerized Instrumentation Design

Digital Logic Design

Discrete Structures

Signals & Systems

Probability and Inference

Lasers and Optoelectronics

Controlled Fusion

## SKILLS

### PROGRAMMING

Over 5000 lines:

Java • Shell • JavaScript • Matlab

OCaml • Python • Rails •  $\text{\LaTeX}$

Over 1000 lines:

C • C++ • CSS • PHP • Assembly

Familiar:

AS3 • iOS • Android • MySQL

## INTERESTS

Cooking • Boxing • Particle Physics

Fusion Engineering • Music • Aerospace

Engineering

## EXPERIENCE

### MOAT | SOFTWARE DEVELOPER

May 2012 – Present | New York City, NY

- Develop the full-stack web application for Moat's enterprise-level brand advertisement search engine.
- Build a real-time usage-reporting tool for the brand intelligence application.
- Design a heterogeneous network of web crawlers capable of detecting, capturing, and indexing online advertisements. Incrementally extend indexer web reach and capabilities (i.e.- most recently: the inclusion of rich-media advertisements alongside more traditional formats such as the Standard IAB).

### CORNELL UNIVERSITY | LINUX INFRASTRUCTURE CONSULTANT

Jan 2009– May 2012 | Ithaca, NY

- Lead undergrad consultant at the Laboratory for Elementary-Particle Physics.
- Designed, installed, and serviced solutions for a network of high-performance computational nodes used in the study of beams and accelerators, photon science, and particle physics.
- Managed a complex network of heterogeneous Linux nodes responsible for serving the department's administrative tasks.

## RESEARCH

### CORNELL ROBOT LEARNING LAB | UNDERGRADUATE RESEARCHER

Jan 2011 – Mar 2011 | Ithaca, NY

Worked with **Prof. Ashutosh Saxena** to create a supervised learning algorithm for finding good object placements using point-clouds of an object and its surrounding area. Implemented the algorithm on an Adept Viper s850 robotic arm equipped with a Microsoft Kinect. SVM models built from our training examples attained performances in excess of 80% for both precision and recall on both flat and non-flat surface placement. **Publication**.

### CORNELL SPACE SYSTEMS DESIGN STUDIO | POWER SUBTEAM

May 2010 – Dec 2010 | Ithaca, NY

Designed and fabricated the ATxmega128 based power distribution system for Cornell's operationally responsive, high agility space imaging system codenamed 'Violet'.

## AWARDS

2014 top 52/2500

2014 2nd most points

2014 1st/50

2013 National

2013 7th/120

2012 2nd/150

2011 National

KPCB Engineering Fellow

Google Code Jam, Qualification Round

Microsoft Coding Competition, Cornell

Jump Trading Challenge Finalist

CS 3410 Cache Race Bot Tournament

CS 3110 Biannual Intra-Class Bot Tournament

Indian National Mathematics Olympiad (INMO) Finalist

## SOCIETIES

2014 top 12%ile

2014 National

2012 National

Tau Beta Pi Engineering Honor Society

The Global Leadership and Education Forum (tGELF)

Golden Key International Honor Society