

# Paul Kiernan

<http://paulynomial.com>  
pak79@cornell.edu | 646.369.6726

## EDUCATION

### CORNELL UNIVERSITY

May 2012

#### BS IN ELECTRICAL AND COMPUTER ENGINEERING

Double Concentration in Electrical Engineering and Computer Science  
Honors: John McMullen Dean Scholar, Goldfarb Tradition Fellow

## EXPERIENCE

### MOAT

May 2012 – Present

#### SOFTWARE DEVELOPER

- One of three engineers responsible for the development of the full-stack behind Moat Pro, an enterprise ad-intelligence platform that allows clients to research trends in the online advertising industry
- Engineered a network of web crawlers capable of programmatically detecting, capturing, and indexing online advertisements across different geographical regions
- Designed ETL pipeline for aggregating warehoused index results
- Developed API for aggregate results and Pyramid web application for serving reports to clients
- Developed global navigation autocomplete service for web application
- Created Pyramid middleware for logging user engagement with webapp and real-time analytics application for building reports on usage patterns and behaviour
- Encouraged testing and installed a Jenkins continuous integration server for detecting regressions
- Implemented homebrew heterogeneous server role and configuration deployment system in Amazon's EC2

### CORNELL LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS

Jan 2009– May 2012

#### LEAD LINUX INFRASTRUCTURE CONSULTANT

- 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 network of Linux nodes responsible for serving the department's administrative tasks

## RESEARCH

### CORNELL ROBOT LEARNING LAB

Jan 2011 – Mar 2011

#### UNDERGRADUATE RESEARCHER

- 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
- 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 by a robotic arm equipped with a Microsoft Kinect.

### CORNELL SPACE SYSTEMS DESIGN STUDIO

May 2010 – Dec 2010

#### POWER SUBTEAM MEMBER

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

## PROGRAMMING SKILLS

Over 60,000 lines: Python  
Over 5000 lines: Java • Shell • Matlab •  $\LaTeX$   
Over 1000 lines: MySQL • C • C++ • Assembly  
Familiar: JavaScript • CSS • PHP

## INTERESTS

Cooking • Boxing • Particle Physics  
Fusion Engineering • Miyazaki Films  
Aerospace Engineering • Music

## LINKS

Github:// [paulkiernan](#)  
LinkedIn:// [paulkiernan](#)  
Twitter:// [@gaelic](#)