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# **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**

CHARTBEAT INC. August 2014 - Present

#### SOFTWARE DEVELOPER

- Ad Refresh Technical Team Lead
- Rosetta Stone (DFP translation)
- Redshift workers and stuff
- Teaching non-technical members of the company programming through the "Learn Python the Hard Way" online curriculum

MOAT INC.

May 2012 – August 2014

### 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
- Built SVM models from training examples that 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