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 markets to research trends in the online advertising industry.
- Developed network of autonomous web crawlers (Moatbots) capable of programmatically detecting, capturing, and indexing online advertisements.
- Developed ETL for consuming warehoused Moatbot data and transforming it into an optimized, queryable form.
- Developed API to cache architecture for client side report generation and Pyramid application to serve reports.
- Developed autocomplete service for web application that served as the primary means of directing site traffic.
- Developed Pyramid middleware for logging user engagement with the client-facing brand intelligence tool.
- Developed homebrew real-time analytics tool for consuming engagement data to build reports on site usage patterns and behaviour.
- Encouraged testing and deployed a Jenkins continuous integration server for detecting regressions
- Developed 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 an Adept Viper s850 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**