

# PAUL ANTHONY KIERNAN

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## EDUCATION

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**Cornell University | College of Engineering** | Ithaca, New York Graduated: May, 2012  
BS in Electrical and Computer Engineering, John McMullen Dean Scholar, Goldfarb Cornell Tradition Fellow

## RELATED EXPERIENCE

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**Software Developer** May 2012 - present

*MOAT INC* | New York City, New York

- 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).

**Freelance Software Developer** January 2011 – May 2012

**Software Development Intern** Winter 2010

*MOAT INC* | New York City, New York

- Tested high-performance database solutions for a real-time brand advertisement analytics product.
- Built the API to the real-time database solution responsible for the report-generation system of the brand analytics platform.
- Optimized existing analytical models for measuring advertisement viewability and interactivity.
- Introduced additional metrics measuring consumer interactivity with an ad by measuring various properties of heat maps.

**Clustered Computing Consultant** Spring 2009 – May 2012

*Cornell University*, Department of Chemistry and Chemical Biology | Ithaca, New York

- Lead undergraduate consultant.
- Designed, installed, and serviced solutions for a network of high-performance computational nodes used in various computational chemistry applications from chemical informatics to molecular dynamics.
- Managed a complex network of heterogeneous Unix boxes responsible for serving the chemistry department's administrative tasks.
- Learned that it is not difficult to sweat in a 55°F datacenter.

**Vice President of Production and Technology** Spring 2010 – May 2012

**Website Administrator** Fall 2009 – Spring 2010

*Slope Media Group*, Department of Information Technology | Ithaca, New York

- Oversaw and facilitated all technical requirements of the entirely student-run Internet media group, Slope Media.
- Developed the original CMS system for the group over the 2009 winter semester.
- Extended the CMS to be able to live-stream student radio and television shows.

**University Nano-satellite Program 6 (UNP-6) Team Member** Spring 2010 – May 2012

*Cornell University*, Space Systems Design Laboratory | Ithaca, New York

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

**Digital Design Final Project** Spring 2009

*Cornell University*, Department of Electrical Engineering | Ithaca, New York

- Designed a fully functioning single-cycle eight-bit microprocessor using a combination of low-level transistor gates and high-level Verilog code on an Altera Cyclone series FPGA.

**Electrical Sub-Team Member** Fall 2008 – Spring 2009

*Cornell University*, Department of Mechanical and Aerospace Engineering | Ithaca, New York

- Designed and implemented the ATmega32-based electromagnetic noise-reducing systems for the data-acquisition system of a production FSAE racecar.
- Additionally oversaw fabrication of a multi-layer PCB that ultimately implemented the system.