

# Kurt W. Kroeger

SOFTWARE PERFORMANCE ENGINEER @ ISILON

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## Education

### Purdue University

West Lafayette, IN

B.S. IN COMPUTER SCIENCE MINOR IN ORGANIZATIONAL LEADERSHIP

December 2015

- Directed research optimizing applications for the Intel Xeon Phi architecture
- Led team that created an analysis platform for Enova Financial based upon CouchDB and EC2

## Experience

### Dell/EMC Isilon

Seattle, WA

SOFTWARE ENGINEER - PERFORMANCE

Feb. 2016 - Current

- Assisted in closing escalated, complex mission critical or politically hot customer performance issues
- Developed and used performance analysis tools (DTrace, KTrace, and proprietary tools)
- Evaluated next-generation Isilon hardware and releases for performance and scaling capabilities
- Root cause analysis of complex performance problems in OneFS across the entire stack (userspace, kernel, and hardware)

SOFTWARE ENGINEER INTERN - ENGINEERING SERVICES (CLUSTER PROVISIONING AND IAAS)

May 2015 - August 2015

- Modularized software to improve extensibility and usability
- Parallelized provisioning code and removed bottlenecks which reduced cluster provisioning times by 50%

SOFTWARE ENGINEER INTERN - INSIGHTIQ (PERFORMANCE MONITORING AND REPORTING)

May 2014 - August 2014

- Overhauled logging based upon requests from customers, the InsightIQ team, and Isilon support
- Work finished ahead of schedule and shipped in the next release (IIQ 4.0)

### Rosen Center for Advanced Computing

West Lafayette, IN

HPC SYSTEMS ENGINEER

May 2012 - Dec. 2016

- Evaluated new HPC technologies (HP Moonshot & Xeon Phi) for performance and scaling capabilities
- Setup PoC Cloudstack & Openstack solutions then assessed their ability to solve our IaaS goals

## Extracurricular Activities

### ACM SigHPC / Student Cluster Challenge

West Lafayette, IN

PRESIDENT & TEAM LEAD

Feb. 2013 - Nov. 2014

- Directed scheduling for maximal efficiency and performance along with monitoring progress
- Participated in SC12 (Salt Lake City), ISC'13 (Leipzig, Germany) and SC14 (New Orleans)

### BoilerMake

West Lafayette, IN

HEAD OF USER EXPERIENCE

April 2013 - Dec. 2016

- Purdue's MLH hackathon with over 500 participants and \$250k in funding
- Managed a team of 6 to oversee AV, Electrical, Food, Internet and Layout

## Honors & Awards

Jun 2017 **Excellence@EMC Gold Award**, Rookie of the Year, high impact within the first year of employment

Dell/EMC Isilon

Feb 2017 **Excellence@EMC Bronze Award**, Performance characterizations supporting a critical account

Dell/EMC Isilon

Aug 2016 **Excellence@EMC Silver Award**, Automating and streamlining performance reporting

Dell/EMC Isilon

June 2015 **Excellence@EMC Silver Award**, Delivering ahead of schedule and well above the standard mark

EMC Isilon

## Skills

**Databases** CouchDB, InfluxDB, MongoDB, SQL

**Programming** Bash, C, C++, Java, Javascript, Perl, Python

**Tools** Cloudstack, DTrace, Git, KTrace, Openstack, PCAP, Puppet, SVN