# Kendra Garwin

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## EXPERIENCE

### KNEWTON, INC. | Security Engineer
oct 2014 - present | New York, NY
Develop security policies and encourage cultural buy-in of security procedures. Architect and support security-focused tools, services, and infrastructure improvements. Specialize in the implementation of statistics-based analytical tools for network logs and security events.

### STROZ FRIEDBERG, LLC | Security Analyst
aug 2013 - oct 2014 | New York, NY
Executed security reviews addressing vulnerability management, business logic, and overall cyber risk profile. Supported client engagements by applying physical and mathematical science to complex security problems.

### CARNEGIE MELLON HUMAN-COMPUTER INTERACTION | Developer
may - dec 2011 | Pittsburgh, PA
Developed software and a high-quality corpus to analyze sentiment in online group interactions.

## RESEARCH

### RAPID PROTOTYPING OF COMPUTER SYSTEMS | Demo Master
feb - may 2011 | Pittsburgh, PA
- Managed a team in the development of novel workflows, social data mining tools, and economic analysis of distributed work.
- Directed the coding of a proxy layer between a database and front end of a cloud-based collaborative system.

### CARNEGIE MELLON COMPUTER SCIENCE | Head Research Assistant
may - aug 2009 | Pittsburgh, PA
Lead a study of verification methods for hybrid systems with **Andre Platzer**, analyzing the dynamics of traffic flow and providing a protocol for collision avoidance between vehicles during lane change maneuvers.

## CURRENT PROJECTS

### MARKOV ANALYSIS OF FIREWALL LOGS
Developing scripts using a markov model approach to predict the probability of network traffic density on a firewall.

### CLOSED CIRCUIT SURVEILLANCE OPTIMIZATION
Prototyping an application that determines the optimal layout for CCTV cameras whie minimizing cost and maximizing coverage.

## COMMUNITY

### TUTORING | Math Tutor
jun - aug 2010 | Paoli, PA
Tutored college students in proof construction, probability, combinatorics, and basic analysis.

### SADHANA FOREST | Volunteer
jan - feb 2010 | Auroville, Tamil Nadu, India
Contributed to the ecological revival of the desiccated tropical dry evergreen forest and helped maintain sustainable infrastructure for the community.

### SIBERSONG SLEDDOGS | Training Musher
aug - dec 2009 | Ashland, NH
Assisted owner in the care and training of 32 racing Siberian huskies for mid-distance sleddog races.

## EDUCATION

### CARNEGIE MELLON
B.S. in Mathematics
aug 2013 | Pittsburgh, PA

## SKILLS

### PROGRAMMING
Over 5000 lines:
Java • Python • C • Perl
Visual Basic • LATEX
Over 1000 lines:
C# • C++ • sML • PHP • R
Familiar:
JavaScript • MySQL • Matlab

### TOOLS AND LIBRARIES
Security
*Qualys, RedSeal, StealthAudit, Metasploit, Kismet*
Development
*Git, SVN, Eclipse*
Infrastructure
*Splunk, AWS, Chef, Ansible*
Libraries
*numpy, OpenNLP, KeYmaera*

### OPERATING SYSTEMS
Linux
*Kali, BackTrack5, Debian, Fedora, Ubuntu*
Windows XP, 7, 8
Mac OS

### FOREIGN LANGUAGES
German - Working proficiency
Spanish - Elementary proficiency

## INTERESTS/HOBBIES
Classical Piano • *Expert*
Mid-Distance Running • *Advanced*
Archery • *Intermediate*