

# Benjamin Lipton

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## EDUCATION

**Rochester Institute of Technology**, Rochester N.Y. M.S. Computing Security. Currently enrolled.  
**Swarthmore College**, Swarthmore PA. B.S. Engineering/B.A. Computer Science. Graduated 2012.

## SKILLS

**Security:** Reverse engineering, vulnerability scanning, anonymity-preserving cryptography

**System Administration:** Linux, Git, Debian packaging, monitoring, Puppet, networking, Xen

**Programming:** Python, C, C++, R, Scheme, Go, Java

## EXPERIENCE

**Research Assistant**, Lab of Sumita Mishra, RIT, Aug. 2015 - present

- Developed systems to protect user privacy in the smart grid

- Analyzed anonymity and performance provided by different mix networks

**Site Reliability Engineer**, Google, Inc., Sep. 2012 - Aug. 2015

- Managed a fleet of Xen virtual machines in datacenters and offices around the world

- Participated in a 24x7 oncall rotation responding to user and machine-generated alerts

- Redesigned the fleet's monitoring to reduce legacy dependencies and be more fault-tolerant

- Supported a custom Linux distro and several systems automating fleet maintenance

- Contributed code to Ganeti, an open-source cluster virtualization management system

**Lab Manager**, Swarthmore College IT Services, Aug. 2009 – May 2012

- Installed and maintained computer clusters in dorms, labs, and common spaces

- Answered calls, emails, and walk-in questions from faculty and students

**System Administrator**, Swarthmore College Computer Society (SCCS), Oct. 2010 – May 2012

- Cooperatively managed Linux web (LAMP) and email servers

- Initiated a project to add auditing capabilities and identify security threats

- Participated in development of the GUTS user request processor (presented at LISA'12)

- Debugged LDAP, NFS, DHCP, and DNS issues on the SCCS network

## RELEVANT COURSEWORK

**Computing Security:** Computer Viruses & Malware, Cryptography, Web Application Security

**Computer Science/Engineering:** Operating Systems, Computer Vision, Parallel and Distributed Systems, Compiler Design, Theory of Computation, Computer Architecture

## AWARDS AND HONORS

**Recipient**, McCabe Engineering Award, 2012

**Member**, Phi Beta Kappa Honor Society, inducted 2012

**President**, Tau Beta Pi, Pennsylvania Kappa Chapter, 2011-2012

**Associate Member**, Sigma Xi Research Society, inducted 2011

**Valedictorian**, High School for Math, Science and Engineering Class of 2008

**Recipient**, National Merit Scholarship, 2008