

# Ian Foster

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http://vorsk.com

## Experience

- **Salesforce** June 2014 - September 2014  
**Product Security Intern**
  - Implemented client side XSS detection and reporting on main application
  - Created a Virtual Patching filter to block known malicious inputs to application live as they are discovered
  - Reviewed and audited client applications submitted to run on the Salesforce platform
- **Salesforce** June 2013 - September 2013  
**Software Developer Intern**
  - Used natural language processing to parse and convert English text into available fields for Salesforce database objects
  - Created a rich form which uses NLP processing and auto completion for quick task entry on mobile platforms
- **Microsoft Corporation** June 2012 - September 2012  
**Software Developer Intern**
  - Created a test tool for Secure Negotiate; exposing bugs before the new feature was released with Windows File Server
  - Built a series of intelligent fuzzing test tools for the new features released in SMB3 shipping with Windows 8 and Server 2012
- **ViaSat Inc.** June 2011 - September 2011  
**Software Engineer Intern**
  - Team internship preparing for Exede satellite internet service launch
  - Used Python and the Windows API to automate network speed tests to measure the quality of the satellite internet service
  - Enhanced network security by adding digital signatures to the build process for device images to prevent unsigned code from executing
- **i-SAFE Inc.** October 2009 - June 2011  
**Software Developer; IT**
  - Used PHP, MySQL, and SQL to build an extensive set of tools to overcome the limitations of an aging CRM implementation that was inhibiting sales
  - Built a Time Tracking application with the CakePHP framework using PHP and MySQL replacing the need for paper time sheets and increasing efficiency
  - Developed an exploit to regain access to a locked surveillance system, eliminating the need to replace it

## Skills

### Programming Languages

C, C++, Go, Java, Python, JavaScript, PHP, HTML, CSS, SQL

### Tools

Git, SVN, Eclipse, IntelliJ IDEA, Visual Studio

### Platforms

Linux, Unix, Windows, OS X, Android, VMWare

## Projects and Technical Experience

- **Android Developer** 2011 - Present
  - Reverse engineered the SquareUp reader allowing me to create my own applications that use the device, including an ID card reading application winning me first place at the UCSD Facebook Hackathon
  - Worked with a team to create a CrossFit fitness application for a Software Engineering course
  - Designed a client/server communication API for a multi-user fortune application
- **DNS Trends Research** 2011 - Present
  - Personal research project that collects domains on the internet and saves them in a relational database using PostgreSQL, Python, PHP, C++, and Go
  - Analyzes trends and changes in the DNS system, including new GTLDs and flow of domain registrations and transfers
- **ToorCon** 2010 - Present  
**Information Security Conference**
  - Volunteer member of ToorCon and ToorCamp staff
  - Speaker at ToorCamp 2014, presented on the current state of SMTP security
  - Presented a lightning talk on the mechanics and security of magnetic cards

## Education

- **University of California San Diego** Expected Graduation: June 2015  
**M.S. Computer Science: GPA: 3.4**
  - Researching SMTP security and TLS adoption
  - Member of CESR: Center for Evidence-based Security Research
- **University of California San Diego** Graduated: March 2014  
**B.S. Computer Science: GPA: 3.7, Highest Distinction**
  - Security and Cryptography Cluster
  - Computer Science tutor for Rick Ord for Object-Oriented Programming and Systems Programming
  - Completed honors research project with the security department to collect, analyze, and identify malicious domain names
  - Founder and president of Eve; a software security and exploit organization to further understand system security
  - Worked on a student team to redesign and build AutoGrader; software used by the CSE department to manage collection and grading student's work