Kevin P. Dyer

www: https://kpdyer.com **email:** kpdyer@gmail.com **github:** https://github.com/kpdyer

About Kevin

I'm a Staff Software Engineer at Google. I'm responsible for building scalable security solutions that meet the security, reliability and compliance needs of nearly all products at Google.

Education

2015 **Ph.D., Computer Science**
Portland State University

2007 **M.Sc. with Distinction, Mathematics of Cryptography and Communications**
Royal Holloway, University of London

2006 **B.S., Computer Science with Mathematics**
Santa Clara University

Current Role

2015 - now **Software Engineer**, Google, Mountain View, CA, USA
Tech Lead for multiple security services

Previous Roles

2014 (intern) **Software Engineer**, Google / University of Washington
Peer-to-peer networking, nodejs, C++, Cryptography, JavaScript

2013 (intern) **Research Scientist**, RedJack, Silver Spring, MD, USA
Network security, Python, Cryptography, Multi-threaded programming

2010 - 2015 [Ph.D. Student]

2008 - 2010 **Software Engineer**, NDS, Staines, UK
- *Web app with 1M+ users*, PHP, Oracle, CSS, JavaScript, Java
- *Backend Security Infrastructure*, Java, XML

2007 - 2008 **Software Engineer**, Imagineer Systems, Guildford, UK
VFX Suite for Film/TV Post Production, C++, Qt, PostgreSQL

2002 - 2007 [B.S., M.Sc. Student]

Selected Open Source Projects

- **fteproxy**, Python, https://fteproxy.org
  A TCP proxy that transmits arbitrary datastreams by sending messages that match a user-specified regular expression.
- **marionette**, Python, https://github.com/kpdyer/marionette
  A TCP proxy that allows users to have fine-grained control over traffic features such as connection duration, number of messages sent, and message format.

Selected Publications

- **Dyer K.P.**, Coull S.E., Shrimpton T. *Marionette: A Programmable Network Traffic Obfuscation System*, USENIX Security 2015. (Acceptance rate: 15%)
- **Dyer K.P.**, Coull S.E., Ristenpart T., Shrimpton T. *Protocol Misidentification Made Easy with Format-Transforming Encryption*, In proceedings of the ACM Conference on Computer and Communications Security (CCS), 2013. (Acceptance rate: 20%)
- **Dyer K.P.**, Coull S.E., Ristenpart T., Shrimpton T. *Peek-a-Boo, I Still See You: Why Efficient Traffic Analysis Countermeasures Fail*, In Proceedings of the 33rd IEEE Symposium on Security and Privacy, 2012. (Acceptance rate: 13%)

For a complete list of my publications, visit my Google Scholar page.