

CS 6262 Recommended Readings

Recommended Reading for Lesson 1:

[The DDOS that almost Broke the Internet](#)
[Practical Network Support for IP Traceback](#)
[A DoS-limiting Network Architecture](#)

Recommended Reading for Lesson 2:

[Spamalytics: An Empirical Analysis of Spam Marketing Conversion](#)
[PharmaLeaks: Understanding the Business of Online Pharmaceutical Affiliate Programs](#)

Recommended Reading for Lesson 3:

[The Hacker Playbook – Practical Guide to Penetration Testing](#), by Peter Kim

Recommended Reading for Lesson 4:

[A Look Back at “Security Problems in the TCP/IP Protocol Suite”](#)
[Steve Friedl's Unixwiz.net Tech Tips: An Illustrated Guide to the Kaminsky DNS Vulnerability](#)
[BGP Security in Partial Deployment](#)

Recommended Reading for Lesson 5:

[Securing Frame Communication in Browsers](#)
[The Security Architecture of the Chromium Browser](#)
[Exposing Private Information by Timing Web Applications](#)
[An Introduction to Content Security Policy](#)
[Play safely in sandboxed IFrames](#)
[The Basics of Web Workers](#)
[Using CORS](#)
[Secure Session Management With Cookies for Web Applications](#)
[Origin Cookies: Session Integrity for Web Applications](#)
[ForceHTTPS: Protecting High-Security Web Sites from Network Attacks](#)
[Towards Short-Lived Certificates](#)

Recommended Reading for Lesson 6:

[Ether: Malware Analysis via Hardware Virtualization Extensions](#)
[Automatic Reverse Engineering of Malware Emulators](#)
[Exploring Multiple Execution Paths for Malware Analysis](#)
[Jekyll on iOS: When Benign Apps Become Evil](#)
[On Lightweight Mobile Phone Application Certification](#)
[Mitigating Android Software Misuse Before It Happens](#)

Recommended Reading for Lesson 7:

[BotHunter: Detecting Malware Infection Through IDS-Driven Dialog Correlation](#)
[BotMiner: Clustering Analysis of Network Traffic for Protocol- and Structure-Independent Botnet Detection](#)
[Modeling Botnet Propagation Using Time Zones](#)

Recommended Reading for Lesson 8:

[ZMap: Fast Internet-Wide Scanning and its Security Applications](#)
[Building a Dynamic Reputation System for DNS](#)
[Detecting Malware Domains at the Upper DNS Hierarchy](#)
[The Core of the Matter: Analyzing Malicious Traffic in Cellular Carriers](#)
[Beheading Hydras: Performing Effective Botnet Takedowns](#)

Recommended Reading for Lesson 9:

Bitcoin and Cryptocurrency Technologies: A Comprehensive Introduction

Recommended Reading for Lesson 10:

~~Tom Mitchell, Machine Learning, McGraw Hill, 1997~~

Machine Learning for Humans – Parts 1, 2.1, and 2.2

A Framework for Constructing Features and Models for Intrusion Detection Systems

Anomalous Payload-based Network Intrusion Detection

Polymorphic Blending Attacks

Misleading Worm Signature Generators Using Deliberate Noise Injection

Recommended Reading for Lesson 11:

Secure and Flexible Monitoring of Virtual Machines

Lares: An Architecture for Secure Active Monitoring Using Virtualization

Secure In-VM Monitoring Using Hardware Virtualization

Inference Attacks on Property-Preserving Encrypted Databases

Practicing Oblivious Access on Cloud Storage: the Gap, the Fallacy, and the New Way Forward

Additional papers referenced in Lesson 11:

Practical Oblivious Storage

Oblivistore

Path ORAM

Oblivious RAM Simulation with Efficient Worst-Case Access Overhead

Recommended Reading for Lesson 12:

How to Share a Secret

Miguel Castro and Barbara Liskov. Practical Byzantine Fault Tolerance