

Alexander Scheel

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8192-bit RSA Key

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GitHub – cipherboy

[Overview]

- Thinker, [hacker](#), and cryptographer.
- Penetration testing, algorithms, and application development.
- Algorithmic specialties include graph theory and cryptography.
- Friendly, energetic, inquisitive, and easy to work with.

[Technology]

Programming Languages:

Go, Ruby, Python, XML/HTML5, CSS3, JavaScript, PHP, C, C++, Assembly, Java

Operating Systems: Linux [Gentoo, Fedora, Debian], Mac OS X, Windows (XP – 10)

Desktop Environments: Cinnamon, Screen, Fluxbox, GNOME Shell, Unity, KDE

Project Management: Git, [GitHub](#), Make

[Experience]

ISEAGE October 2016 – present

ISEAGE is a security research lab at ISU which runs five Cyber Defense Competitions a year.

- Developed scenario VM images, exploitable backdoors, and competition anomalies for use in an isolated environment.
- Competition roles include Red Team Assistant Lead and Green Team Lead.

IBM Cloud Managed Services May 2016 – August 2016

CMS is a portion of IBM providing managed services on top of a diverse cloud platform for hundreds of companies.

- Automated compliance and security; improved developer workflow and auditing of compliance with Nessus and AppScan on Source in Java.
- Technical mentorship under Steven J. Munroe. Optimizations for SHA-3 on Power8+ assembly with vector instructions.

Rochester Clinic 2014–2015

Rochester Clinic is a family owned clinic based in Rochester, Minnesota.

- Software and hardware consultant.
- Lead patient data migration of 12k records to a new EMR provider. Database manipulation and CSV generation using Ruby, implemented [C-CDA](#) from specification, XSLT rendering. Education of staff regarding migration procedures.

[Projects]

Cryptopals present

Solving various cryptographic challenges and attacking insecure assumptions. Working on Set 8 (of 8 sets).

COMS 309 – EduTLS 2016

TLS 1.2 library implemented in C++ as part of an API-based web framework.

crypto-collection present

Various cryptographic algorithms with cross-platform implementations in C.

[Awards & Events]

Awards

ISEAGE Cyber Defense Competitions

- ISU CDC: 5th place – Fall 2016
- ISU CDC: 4th place – Spring 2016
- National CDC: 1st place – 2016
- ISU CDC: 2nd place – Fall 2015

Events:

- [ACM-ICPC](#) – Fall 2015, Fall 2016
- [HackISU](#) – Fall 2015

[Education]

Iowa State University (2015 – present)

- Majors: Computer Science and Mathematics • Classification: 2nd Year, Senior
- Dean's List: Fall 2015, Spring 2016, Fall 2016 • Credits: 105 • GPA: 3.83

References available upon request.