Title: Python for Pentesters

Date/Time: (2-Days) Wednesday-Thursday, April 11-12, 8am-5pm

## Description:

Have you ever been working on a penetration test, and encountered a problem for which there is no perfect tool? Maybe you know how to step through a test sequence manually but don't have a way to automate it. Python is a versatile, cross-platform, well documented language with an enormous amount of support through pre-existing libraries. This makes it very useful for a variety of penetration testing tasks as well as everyday system administration. This course introduces intermediate Python concepts and libraries to the novice Python scripter in a series of practical lab exercises to solve common pentesting and appsec problems. Important: this class is lab intensive.

## **Instructor:** Jason Gillam (@JGillam)

Jason has over 20 years of industry experience in software design, architecture, and security testing. He graduated from Royal Military College of Canada where he earned his Bachelor of Engineering. Jason was the tech lead for Bank of America's Security by Design team for several years, and is currently a Principal Security Consultant at Secure Ideas, LLC and an IANS faculty member. He is author of many extensions for Burp Suite, and is a contributor to several other projects including SamuraiWTF, MobiSec, and Laudanum. His greatest areas of interest include pentesting web and mobile apps, securitying the SDLC, and user/employee behavior as it pertains to social engineering.

### **Course Outline:**

- Introduction
- Basics Review
- Using the basics
- Cryptography
- Sockets
- Object Oriented Python
- Web Applications
- External Processes

#### Who Should Attend:

Security practitioners (red, blue, or somewhere between) who want to get a better grasp on Python to use it in daily tasks and automation. This class is not designed to teach programmers how to write complex applications in Python.

# **Student Requirements** (what should they bring with them)

- A basic understanding of programming structure (i.e. variables, conditionals, functions, loops, etc...)
- Attend a basic Python course that covers elementary Python concepts. Suitable options include:
  - Codeschool's "Try Python" course (currently free): http://campus.codeschool.com/courses/try-python
  - CodeAcademy's Python track (free): https://www.codecademy.com/
  - Or for the quick-study or review, watch the Professionally Evil Python Primer: https://www.youtube.com/watch?v=fami0WJCH1U