

# Tejas Khairnar

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## EDUCATION

• Masters Student (MS) at ASU	Computer Science (Expected 2017)	3.75 CGPA
• University of Mumbai, India	BE Computer Engineering (Aug 2009-May 2013)	3.6 CGPA

## Academic Project Work

- **Threat Intelligence and Analytics (TIA) Project**
  - Graduate Research Assistant under Dr.Gail-joon Ahn of School of Computing, Informatics and Decision Systems at ASU.
  - Worked as a Python developer for threat intelligence and analytics project. This tool gains its intelligence from four modules namely, Malware, SocialSEAL, Bitcoin and IOC (Indicators of Compromise).
  - Wrote scripts in order to populate data analyzed by cuckoo malware analysis tool into Neo4j Graph database.
  - Developed RESTApi in python for the threat intelligence system.
- **SQLInjection Firewall**
  - Developed SQLInjection Firewall for php based web applications.
  - The logic behind this implementation was to proxy every sql query made to the database via a firewall so that malicious sql queries can be filtered before they get executed in the database.
  - Our solution is also able to through specific exceptions denoting the attempt of an attacker to inject into a SQL database using conditions like always true.
  - Prevented from 2<sup>nd</sup> Order SQL injections attacks as well. All the queries getting executed on SQL database are proxy through the firewall, hence we were able to defend against 2<sup>nd</sup> Order SQL injection attacks as well.
- **Virtual Machine Introspection based IDS**
  - Implemented virtual machine introspection in C language over QEMU hypervisor to introspect guest virtual machine running on Linux OS.
  - Using this introspection technique our application was successfully able to detect hidden process deployed using a rootkit. Our application for introspecting Windows guest OS was implemented on the logic of detection of Direct Kernel Object Manipulation (DKOM) based rootkit attacks.
  - To successfully detect hidden process on Unix based OS, we implemented detection of syscall hooks.
  - Our application is able to introspect Windows XP, Windows 7, Ubuntu 14.04 and Fedora OS for intrusions like rootkits or malwares.

## WORK EXPERIENCE

<b>Intuit</b>	<b>Information Security Analyst Intern</b>	May 2016 till date
<ul style="list-style-type: none"><li>• Currently working as Information Security Analyst Intern in the Enterprise Business Solution (EBS) Team at Intuit, Menlo Park office.</li><li>• Part of the Identity and Access management team. Working on customization of Agentless Integration Kit by PingIdentity to incorporate the solution into current authentication process for Intuit and its customers.</li><li>• Understood Single Sign-On solution architecture implemented at Intuit. Studied various SSO protocols like OAuth, SAML &amp; OpenID connect.</li><li>• Configured Apache Integration kit, a product of Ping Identity, in order to enable Single Sign-On for web applications hosted over Apache WebServer.</li></ul>		
<b>KPMG, India</b>	<b>Associate Consultant</b>	June 2013 to July 2015
<ul style="list-style-type: none"><li>• Developed <b>Anti-Phish detection tool</b> using Python Scripting language.</li><li>• Special recognition and client appreciation for <b>“Capturing SSL traffic in clear text on mobile (Android) device”</b> by performing MITM attack using ARP Poisoning and SSL Stripping.</li><li>• Performed Web application Security testing for major banking and telecommunication sector clients.</li><li>• Imparted training on iOS and BlackBerry mobile application security testing.</li><li>• Awarded as <b>“Above &amp; Beyond”</b> Employee for successfully performing web application security testing and receiving multiple client appreciations.</li><li>• Performed <b>Mobile application security testing</b> on various platforms viz., Android, iOS, BlackBerry and Windows.</li><li>• Performed configuration review of Oracle Database, Windows and Linux operating system.</li><li>• Conducted <b>Minimum Baseline Security Assessment</b> review according to the Department of Telecomm guidelines for Major telecom sectors in India.</li><li>• Developed automated tool, “ReGeneSys”, for generating deliverables to the client using PHP and Javascript web development languages.</li></ul>		

## CERTIFICATIONS

- Completed Training for **CCNA** certification
- Completed training for **Certified Ethical Hacker (C|EH)**
- **Python for Security Professionals** on [www.cybrary.it](http://www.cybrary.it)
- Completed **Linux Lab** Certification course conducted by Dr. Deven Shah and Dr. Ambavde at Sardar Patel Institute of Technology
- **Cyber Forensics and Crime Investigation(CFCI)** certification course at Sadar Patel Institute of Technology conducted by Horizon group a MBI initiative

## TECHNICAL SKILLS

• <b>Programming Languages</b>	: Java, Python, C
• <b>Databases</b>	: MySQL, Oracle DB, SQL Server
• <b>Web Technologies</b>	: PHP, Javascript
• <b>Vulnerability Assessment Tools</b>	: Metasploit, Nessus, IBM AppScan, Burp Suite, Echo Mirage, sqlmap
• <b>Platforms</b>	: Windows, Linux, Mac OS
• <b>SIEM Tools</b>	: Splunk
• <b>Identity &amp; Access Management</b>	: Oracle Access Manager, Oracle Identity Manager, PingIdentity