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# KARTHIK MALLA

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### **ADDRESS**

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#### **ABOUT ME**

A professional Security Consultant & Full Stack Security Integration Developer with more than 9 years of industrial experience. I have strong coding skills in multiple languages and worked with the most recent security tools to protect corporate environment with high-end cyber security techniques that can challenge complex modern cyber-attacks.

My experience lies in Security Incidents & Event Management, Threat Hunting, Investigating, PCI compliance, Splunk, Splunk Enterprise Security (ES) and DLP etc.

# **VISA STATUS**

**Permanent Resident** – Skilled Migration Visa (No restrictions and no sponsorship required)

#### **KEY DELIVERABLES**

- As a single resource I installed & configured complete DLP solution in on-premises servers of Suncorp Group and wrote DLP policies for Web, Email & Endpoint using Symantec DLP.
- Integrated Symantec DLP logs with Splunk and created dashboards to categorise DLP incidents based on anomaly and improved the DLP policies.
- Able to deliver complete DLP setup, writing banking level policies & Splunk integration for Suncorp Group in just 4 months contract as a single resourse.
- At Qantas, I discovered an actual SQL Injection that was leaking sensitive data and had not been blocked by WAF.
- At Qantas, I detected a vulnerability that lets attackers to reset Qantas staff "active directory" accounts without providing any previous password or answering security questions.

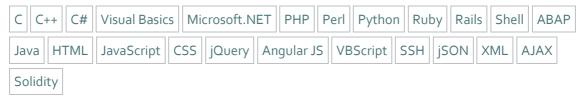
- At Qantas, I wrote Splunk use-cases to design dashboards, raise alerts and generate reports.
- At Mash Marketing, I was pivotal in setting up their website. Ensured the network was more secured and performed pen-testing where I found and reporting numerous potential vulnerabilities.
- At Queensland Supreme Court project, I was able to complete the project within the given tight project deadlines.

#### **EDUCATION**

- Bachelor of Engineering Computer Science (Anna University, India)
- Microsoft Visual C# .NET Certification (A Grade) from NIIT
- XML and ADO.NET Certification (A Grade) Certification from NIIT
- Obfuscation (Code & Web Security) Certification from VIT University
- Web Services & Tools Certification from Arunai Engineering College
- Cisco Routing Basics from Cisco Academy

#### **SKILLS**

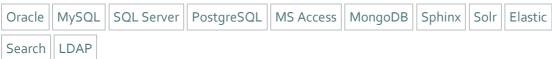
Languages & Frameworks



Application Program Interfaces

Web API	jSON	XML	ReST	Soap

Databases & Indexers



Security Incidents and Event Management

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| Splunk | Splunk Enterprise Security (ES) | ArcSight
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Network Firewalls



• Web Application Firewalls

A	Akamai	Imperva	AWS WAF	Cloudflare	F <sub>5</sub>	
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# • Endpoint Security

Crowdstrike Trend Micro Security Suite Sophos Endpoint Security McAfee Kaspersky Total

Security Symantec Endpoint

# • Identity Access Management (IAM)

Microsoft Active Directory | Microsoft Azure | PAM | FIM | MIM | Open ID | RSA Tokens

# • Information Rights Management (IRM)

Microsoft Active Directory | Microsoft Azure

## • PCI Compliance Monitoring

Qualys Monitoring | Metasploit

### DevOps Automation

Docker Puppet Chef

# Cryptography & Data Security

- a. **Encryptions** RSA, Key Pairs
- b. Hashing MD5, SHA
- c. Proxies Squid, Nginx, Websense
- d. Virtual Private Network
- e. **Network Encryption** SSL, TLS
- **f. Disk Encryptions** Bitlocker, AWS Disk Encryption

# Endpoint File Audit

Windows Security Audits Linux AuditD

### Authorisation & Access Management, Anomalies and Alerting

Brute-Forcing Account Lockouts Account Creation Account Modification Privileged Group

Modification Domain Admins Modifications Staff Login to unauthorised workstations

#### Data Loss Prevention

McAfee ePO Symantec Enforce Server

#### Remote Access and Remove Access Events Monitor

# DNS Monitor

InfoBlox MX ToolBox

### Threat Hunting

#### Penetration Testing

MetaSploit SQLMap	Wireshark SSL Testing	Manual PenTesting	Cookie Strength Testing
BeEF nMap Dmitry	Session Management	OWASPZap	

Senior Security Engineer

Insurance Australia Group

Oct 2017 - Present

- Developing Splunk Enterprise Security use-cases.
- Writing Splunk correlation searches and improving existing Splunk ES correlation searches to align with the business model and reduce the number of false-positives.
- Tuning the Splunk SIEM incidents.
- Installing ServiceNow app for Splunk.
- Integrating Splunk incidents to ServiceNow SecOps.

Security Analyst

Suncorp Group

Jun 2017 – Oct 2017

- Installing, configuring and managing Symantec Enforce Console Three Tier Platform and writing policies for data loss prevention that supports Windows 7 Embedded in Thin Client Wyse Terminals.
- Upgrading bluecoat proxies to SG400-30
- Upgrading Blue Coat Content Analysis CAS to S400-A3
- Upgrading Blue Coat Malware Analysis to MAA-S500-10
- Reviewing and updating firewall policies of F5.
- Setting up Splunk add-ons, on-boarding logs and creating dashboards and generating Splunk reports.
- Monitoring DLP and Firewall policy behaviour in Splunk.
- Creating Splunk dashboard for Application Security Management (ASM/WAF).
- Creating Splunk dashboard for Blue Coat traffic & bandwidth of internal staff.
- Testing network compliance using Splunk logs.

Security Engineer

Mash Marketing

Jan 2017 – Jun 2017

- Improving the company Security Posture.
- Reviewing the ruby on rails code and updating the large-scale application to the latest version of ruby & latest version of rails with thousands of lines of hand written code.
- Performing database migrations and adding encryptions & hashing to the sensitive data wherever required.
- Writing use-cases for Splunk to create dashboards, generate reports and generate alerts. Investigating events and performing drilldown searches to identify the origin.
- Performing penetration testing and improving the WAF rules wherever required.

Security Analyst

Qantas Airways

Sep 2016 – Jan 2017

- On a daily-basis, I did review the incidents in Splunk Enterprise Security and look through dashboards & run search queries to investigate it.
- Designed & developed Splunk use-cases to create alerts for detecting anomaly & vulnerabilities in IAM. IRM, DSS, DLP, PCI Compliance, Malware, Firewalls, DNS, Proxies, etc.
- Migrating logs, dashboards and search strings from ArcSight to Splunk.
- Designed Splunk dashboards to visually identify the treats and WAF activities to identify the potential & actual treats that are not blocked by WAF.
- Monitored logs from 9000 servers hosted in AWS, IBM, TCS, Fujitsu & other data centres and work on Windows, RHEL, Solaris, Mainframe, AIX, etc.

# Security Engineer

# Mash Marketing

Jan 2016 – Aug 2016

- On a daily-basis, I did review the incidents in McAfee ePO dashboard & AWS WAF and respond to the incidents.
- Created AWS instances with security groups, disk encryptions, IAM, installing patches, backing up, snapshotting.
- Setup cloudfront, AWS WAF, replicating data across multiple availabilities zones, monitoring EC2 performance & usage.
- Installed McAfee ePO and did setup DLP rules and application access rules for the client workstations.
- Created auto scaling groups for the AWS instances.
- Configured VPN connection with proxy servers.
- Installing Splunk and Splunk Enterprise Security App for SIEM and compliance monitoring.
- Developing Splunk use-cases for PCI continuous monitoring.
- Performed Penetration Testing.

# Security Integration Dev

#### Onion Blue

Sep 2015 – Jan 2016

- Configured network as per PCI Compliance Regulations Checklist.
- Designed the application as per the standards of OWASP.
- Connected the ReSTful API to call Sphinx using encryption.
- Deployed the AWS instances for this project.
- Configured firewall and IAM rules for the AWS instances.

### Security Integration Dev

Queensland Supreme Court

Jan 2015 – Sep 2015

- Designed the application as per the standards of OWASP.
- Deployed the AWS instances for this project.
- Configured the WAF and McAfee tools in the instance.
- Create Splunk to detect security breaches, analytics.
- Assembled IAM roles within the web application for access management.
- Built ReST API for external access of the application.
- Configured the web server and mail server with SSL certificates.

 Monitoring events in ArcSight for identity access management, web application firewall and improving WAF & firewall rules.

Blockchain Developer

Purchase Bitcoin

Jul 2014 – Jan 2015

- Initially developing apps for Bitcoin Blockchain to sign plain text message into Bitcoin Blockchain.
- Created API to generate wallets.
- Created apps & API to sign transactions.
- Created API to sign plain text with the public key and decrypting it using private key.
- Created API to check the blockchain for transaction history, confirmations, balance, etc.
- Worked on data encryption, key pairs, distributed ledgers, etc.
- Later connected it to Ethereum using Solidity (in 2016 soon Ethereum arrived in market).
- Configured the network as per PCI compliance regulations checklist.
- Developed a payment gateway for bitcoin.

Security Integration Dev

Expedia (EAN)

Dec 2013 – Jul 2014

- Designed Web Application as per PCI Compliance Regulations for Web Application.
- Created Web Application as per OWASP.
- Deployed the dedicated cloud server for this project.
- Configured IAM for this web application.
- Created encryptions for REST API for EAN XML & JSON API.
- Built up WAF and cloudflare, configured firewall rules, web server, SSL, mail servers, etc.
- Configured ArcSight to monitor server workloads, network traffic, applications usage, Endpoint events, anti-malware events, firewall events, identity access management, etc.

#### **PATENTS**

- 1. Remote Accounts Suspension USPTO 2011
- 2. Unique Password Generation with/without hashing USPTO 2011
- 3. URL Session parser for cross language scripting USPTO 2011
- 4. HID bypassing for spam prevention USPTO 2011
- 5. Email public reference code for spam prevention USPTO 2011

# **EMPLOYMENT REFERENCES**

Will be provided later on request