

Engineer at Webroot

WORK EXPERIENCE

Webroot, San Diego, CA – Sr. Software Engineer

Previously, System Software Engineer and Software Engineer

September 14th, 2015 – Current

IP Threat Analysis: In a team, developed a prison system for IPs to publish a threat list. Was a key developer in categorizing the IPs based on its recorded bad activity of threat categories: *Phishing, Botnet, Malware, Proxies, Spam*.

URL Crawling & Threat Detection: Developed and maintained clusters designed in multiple stages to perform safe web-crawling, connecting multi-step process communicating through queues. Obtained an accuracy of 17M+ URL crawls a day. Was successful in identifying ~1% of those as threats. Key part of project **DeepCrawl**; engineered a program to dig related URLs of a threat URL – URLs hosted on same IP of the threat, common paths, previously known, etc. *Patent pending to Webroot.*

Honeypots: In a team, architected, developed and deployed various honeypots on multiple cloud platforms which traps *scanners, malware, injections, DoS attackers*, etc. and feed it to the IP Reputation system of Webroot.

API Monitor: In a team, architected & developed a monitor to check the uptime, latency and accuracy of *WebAPI* products across regions. Monitoring architected at 3 levels: customer, load balancer and individual server.

Anonymous Proxy Identifier: As an innovation, developed a system which can *identify and trap open web IPv4 proxies* which pose a threat to the internet *through tor network*.

Award Solutions, Richardson, TX – Student Volunteer, Project - Openstack

May 27th, 2015 – August 5th, 2015

Alarm Counter Web: Built an app that can run on a Linux Server VM & respond to web-hooks executed on every state transition of a VM in the Alarm Counter. Designed a web page to consolidate all tenant monitors graphically. Information gathered – Ceilometer.

TradeStation Tech., Richardson, TX - Software Developer – Intern

May 16th, 2014 – December 31st, 2014

IISLogAnalysis: Implemented MapR to analyze IIS logs from production servers on a daily basis using the AWS Elastic Map Reduce to output information on number of requests and response codes for different intervals of time. **D3 Web Application:** Using the D3 framework, developed & hosted which gives a graphical view of data from IISLogAnalysis.

Societe Generale, Bangalore - Young Grad, Windows Server Administrator

August 8th, 2012 – July 26th, 2013

Health Check of VMs Automation: Developed scripts to extract the status of production servers on all ESXi present in two data centers & presented it as a web app. As DevOps, investigated cases of unreachable servers, network failures and backup issues. Participated in Disaster Recovery drills. Individually installed and configured ESXi and clusters to host VMs.

KEY ACADEMIC PROJECTS

Mutual Exclusion using Dynamic Voting Protocol: in a Distributed Computing environment: Implemented a File System management (all functionalities) in a Distributed Systems environment using the principles of *Static and Dynamic Voting* between nodes.

Distance Vector Multicast Routing: Developed an application which would simulate the working of *DV Multicast Routing* using UNIX processes. Simulation included BGP & OSPF implementation.

Distributed Node Discovery: Self designed algorithm for discovering all the nodes in a distributed computing network environment. Implemented this algorithm using SCTP - C++.

EDUCATION

M. S. in Computer Science

The University of Texas at Dallas

Graduated: August 2015

GPA: 3.423/4.00

B. E. in Information Science

PES School of Engineering, India

Graduated: August 2012

Score: 81.6/100

SKILLS

Languages

C#	◆ ◆ ◆ ◆ ◆
Python	◆ ◆ ◆ ◆ ◆
C	◆ ◆ ◆ ◆ ◆
C++	◆ ◆ ◆ ◆ ◆

As DevOps,

Cloud Computing Platforms

AWS	◆ ◆ ◆ ◆ ◆
Azure	◆ ◆ ◆ ◆ ◆

MY WORK

<https://bitbucket.org/tejaspattabhi>

PUBLICATION

Tejas Pattabhi, Arti Arya, Pradyumna N, Swati Singh, Sukanya D, "Implementing Delaunay Triangles and Bezier Curves to Identify Suitable Business Locations in the Presence of Obstacles", IJITCS, vol.5, no.3, pp.29-39, 2013.DOI: 10.5815/ijitcs.2013.03.04

[<http://www.mecs-press.org/ijitcs/v5-n3/v5n3-4.html>]