Anthony Fresta

Software Developer, DevOps Engineer, Manager

5219 Elizabeth Ave, St. Louis, Missouri, US, MO 63110

(314) 896-4826

anthony@makersmasher.com

English

BACKGROUND

ABOUT

I have 15+ years experience in a variety of technical roles, I currently lead software development teams, and build large complex systems to allow for complete automation of business processes. I would like to transition from leading teams back to being an individual contributor in some form of security - ideally exploit development, penetration testing, or reverse engineering. I am flexible in how I achieve this.

WORK EXPERIENCE

Manager, Exegy Inc - High Frequency Trading Data Industry
May, 2019 - Present

I lead the team within Exegy to move the organization away from a snowflake approach of managing high frequency trading tickerplants. This presents an interesting challenge due to the real time nature of the service, and a business need to shift focus to managed services. I architect the technical and people aspects of the automation efforts with the goal of reducing costs, increasing customer satisfaction, and lessening the effects of critical path issues. It has been a real life exercise of "The Phoenix Project".

- My main role is leading teams of software developers/devops experts. Added to this, I am a sounding board in the design of architecture across our production systems.
- In addition to my day to day, I am a member of Exegy's Global Information Security Board, working directly with C-level leadership to develop and implement policies and procedures to secure intellectu property, systems, people, and data.

- I automate configuration management, verification, and deployment of tickerplants used in high frequency trading for both production and test systems.
- I continuously work to increase situational awareness, and push a move from a reactionary to proactive config management approach.
- I work directly with executive level management to implement processes, technologies, and solutions to further the tactics and strategy of automation.

Software Developer/DevOps Engineer, Exegy Inc

Apr, 2013 - May, 2019   6 years

Software Developer

- Developed code to bare metal provision servers via HTTPS without the use of layer 2 networking.
- Developed custom iPXE C firmware.
- Developed an extensive amount of puppet software in an effort to completely automate server provisioning and change management.
- Technologies: Python, Ruby, C, Docker, Kubernetes, Puppet, Linux, Rails, Redis, Sidekiq

Lead DevOps Engineer, Newground - Retail Banking Industry

Feb, 2011 - Apr, 2013   2 years 2 months

Developed custom marketing signage in house saving software licensing fees for Newground.

- I administered 1500+ Linux based devices located in financial institutions across the US using OpsCode Chef, and a custom RESTful SAAS I developed to manage and deploy the servers.
- I converted paper based, manual work flows that initiated a server setup based on client specs, and worked them into the SAAS app, automating server deployment.
- Worked with various financial institutions IT departments to implement connectivity between their network and Newgrounds (site to site VPNs, etc).
- Developed custom security practices and standards for compliance of our devices that were installed on client networks.
- Firewall/VPN administration: Cisco ASA 5510
- Installed/Provisioned and managed ESXi server to host the various system component servers.

Co-Founder, Qraving.com (Part Time)

Apr, 2011 - Dec, 2013   2 years 8 months

- Along with my co-founder built Qraving's user base to 5000+ and on boarded over two dozen restaurants.
- Developed back end PHP API used for app information storage/retrieval.
- Development of the webviews that the Android app uses for large parts of it's functionality.
- Planning for scalability, ensuring performance, ensuring security.
- SEO/SEM, traditional marketing, online marketing, sales and support.
- B2B Sales, helped in developing marketing plan.

System Administrator, NOC/SOC tech, Cybercon Colocation Center

Apr, 2008 - May, 2013   5 years 1 month

System admin, developer, troubleshooter, operations.

- Installing memory, hard drive, and power supplies, building servers from the ground up, installing customer hardware (routers, firewalls, load balancers etc).
- Use of Cybercon's custom ticket system to troubleshoot tickets opened by system administrators hosting systems at the data center, including but not limited DNS, firewall, security and networking issues.
- Ground up installation of Cybercons' in-house DNS servers, Cisco routing hardware, and VMware servers (used for hosting customer VMs).

- Writing bash, perl, and C to automate repetitive system administration tasks.
- Building load-balancers based on BIGIP F5 for managed hardware customers.
- Managing Cisco core routers (7500, 6500, 9000) to bind IP addresses/gateways, manage ACLs, block DDOS attacks among other typical Cisco administration duties.
- Detecting compromised systems using Cybercons IDS systems, eradicating spyware, malware, rootkits etc. from managed servers.
- Security auditing through code review, authorization testing, functionality testing, among other common penetration testing methodologies.
- Installing, maintaining, and converting VM hosts/machines based on VMware ESXi 3.5/4.0 and VMware server.
- Routine OS (Linux, Windows server products, BSD) installations.
- Maintenance of several types of backup solutions, including tapes, rotation of virtual disks, and network backups using ftp/scp/nfs/rsync.
- Was asked by management to assume the lead role of security technician. Implemented honeynet and IDS systems, using Virtual machines, honeywall, snort, sebek among other technologies. Setup Virtual machines for collating and managing IDS statistics, along with virtual machines (Backtrack4) for penetration testing of customer servers, and data forensics in case of data loss or outside penetration.

Owner/Operator, Owner/Managing Partner, Pure Ultralounge & Bistro

Oct, 2006 - Feb, 2008   1 year 4 months

PROJECTS EXPERIENCE

Roulette prediction system

Oct, 2021 - present

Attempt to predict where a roulette ball will fall on a wheel (early stages/in progress).

- Machine learning
- C++
- Computer vision

OSCP/OSED
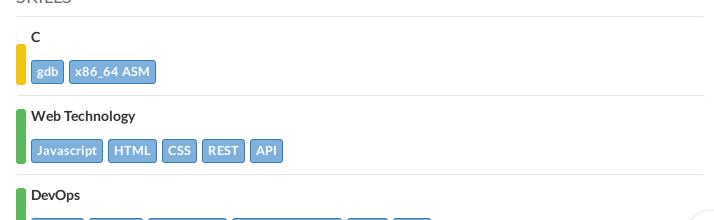
Jan, 2021 - present

Currently working to obtain my OSCP & OSED.

- I am currently reading, listening, practicing everything I can get my hands on in the hopes of obtaining my OSCP and OSED certifications by 2023.

SKILLS

C

`gdb` `x86_64 ASM`

Web Technology

`Javascript` `HTML` `CSS` `REST` `API`

DevOps

`Puppet` `Docker` `Kubernetes` `Docker-compose` `AWS` `GCP`

Python

Linux

CentOS AtomicOS Ubuntu Kali RancherOS bash

Ruby

Ruby on rails Sidekiq Redis OOP

EDUCATION

Computer Science, Undergraduate Studies, University of Missouri - St. Louis

Sep, 2000 - Jun, 2003

INTERESTS

,

Hobbies

Hunting Fishing Sausage making Motorcycles Pot Limit Omaha Poker
Anything to do with Hacker culture, I still go to Barnes and Nobles to buy 2600. Capture the flag challenges
Reverse Engineering My siberian husky

REFERENCES

Available upon request.