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

Anthony has 15+ years industry experience, has led software development teams, and built large complex systems to allow for complete automation of business processes. He is currently transitioning from managing software teams back to being an individual contributor in some form of security (ideally exploit development, penetration testing, or reverse engineering).

WORK EXPERIENCE

Manager, Exegy Inc
May, 2019 - Present

Lead the team within Exegy that moved the organization away from a snowflake approach of managing high frequency trading tickerplants. This presented an interesting challenge due to the real time nature of the service, and a business need to shift focus to managed services. Architected 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.

- Lead several teams of software developers.
- As a member of Exegy's Global Information Security Board, I along with our executive leadership have develop and implemented policies and procedures to secure intellectual property, systems, and data.
- Automated configuration management, verification, and deployment of tickerplants used in high frequency trading for both production and test systems using puppet, and other various technologies.

- Increased situational awareness, to move from a reactionary to proactive management approach.
- Gathered requirements from Engineering, Product Management, and Customer Support/Operations for designing and implementing operational and support tools.
- Implemented test cases and business rules based on the input of multiple teams.
- Worked 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.
- 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, Puppet, Linux

Lead DevOps Engineer, Newground

Feb, 2011 - Apr, 2013   2 years 2 months

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

- Responsible for the administration of 1500+ Linux based devices located in financial institutions across the US, implemented management with OpsCode Chef, and a custom SaaS RESTful app I developed to manage and deploy the servers.
- Took paper based, manual workflow, that initiated a server setup based on client specs, and worked them into the SaaS app to make a server deployment automated.
- Bootstrapped w/ Chef all server deployments.
- Worked with various financial institutions IT departments to implement connectivity between their network and Newgrounds.
- Developed custom security practices and standards for compliance of our devices that were installed on clients networks.
- Firewall/VPN administration- Cisco ASA 5510
- Installed/Provisioned and manage 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 userbase to 5000+ and onboarded over two dozen restaurants.
- Developed backend 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 hostir 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 Ultraloung & Bistro

Oct, 2006 - Feb, 2008   1 year 4 months
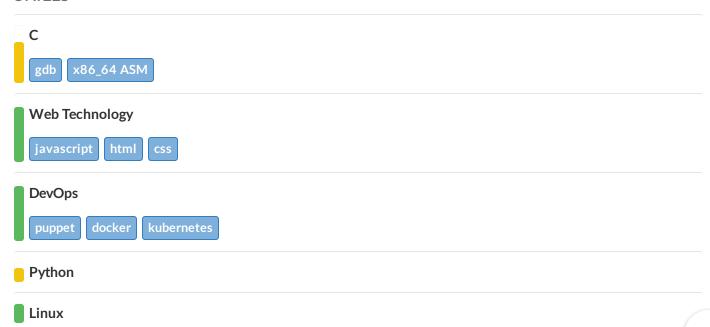
PROJECTS EXPERIENCE

Roulette prediction system

Oct, 2021 - present

Attempt Predict where a roulette ball will fall (in progress)

- Machine learning
- C++
- Computer vision

SKILLS

C

`gdb` `x86_64 ASM`

Web Technology

`javascript` `html` `css`

DevOps

`puppet` `docker` `kubernetes`

Python

Linux

Ruby

Ruby on rails

EDUCATION

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

Sep, 2000 - Jun, 2003

INTERESTS

Outdoors

Hunting Fishing

REFERENCES

Available upon request.