Jeremy Banker

Security Software Engineer

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🔗 https://portfolio.loredous.net

Profiles

 loredous

 jbanker

Skills

Python

Rust

C#

Go

Kubernetes

Agile/Scrum Methodologies

Software Systems Design

Microservice Architecture

Secure Software Design

Certifications

CKAD
Linux Foundation
July 2021

CHFI
EC Council
February 2020

CEH
EC Council
March 2019

Projects

Tommyknocker
Open source automated security control validation service written in Python

Ham Radio Digital Messaging Suite
Full-stack suite of open-source software targeted towards creating a path for fully open digital message handling

UnifiOS DNS Manager
Full-stack utility to allow for advanced control of static DNS entries on UnifiOS network devices.

Remote Solar Monitor and Control System
Low-power monitoring, analytics and control station for remote wireless link site with solar and battery power

Ham Radio Serial Control Interface
Reverse engineering and software implementation of byte-level serial control protocol for amateur radio hardware in Go

Experience

Independent Software Engineer May 2024 - Present

Creating and discussing Open Source solutions for the community

- Designed and created open-source security control validation tool
- Speaker at RMISC 2024 and DefCon 32
- Rust workshop with John DeGoes

VMware Inc. May 2018 - May 2024
Lead Security Software Engineer (Staff Engineer)

Design and implement solutions for VMware IT Security group

- Completed transition of all VMware created IT security tooling to Broadcom after acquisition
- Lead project to identify build pipeline security needs and provide solutions for mitigation or elimination, including creation of multiple open-source tools
- Product Owner and lead developer for open-source offering designed to identify consumed dependencies and potential sources of risk in CI/CD pipelines and software builds
- Architected and implemented cloud-deployed pipeline handling collection, filtering and transport of ~12TB daily log flows into on-premise SIEM with average 99% uptime
- Designed and created internal tooling for automated discovery and identification of network systems impacted by Log4Shell vulnerability
- Championed internal adoption of InnerSource processes and policies for relevant product offerings within security and resiliency org
- Author and present executive-level overview as well as technical deep-dive presentations at internal and external developer and security conferences including BlackHat and DefCon

VMware Inc. Aug 2015 - May 2018
Sr. Technical Support Engineer

Tier 3 support for VMware VDI products in global customer environments.

- Authored and presented live and recorded training sessions for global support team
- Created internal and public facing training resources for previously undocumented product features
- Created modular CLI tooling to automate log analysis from customer environments, resulting in 50% reduction of time spent on manual analysis and 20% global reduction in MTTR

ZOLL Data Inc. June 2014 - July 2015
Software Engineer

Development on medical data collection application used to enhance the level of service provided by emergency organizations nationwide, and report required medical data to government entities.

- Collaborated with support, field and customer resources to resolve customer-impacting software defects in a timely manner to avoid service interruptions for emergency personnel
- Headed team to redefine source control and build processes, leading to a decrease in lost time due to build issues

Pivot3 Inc. October 2013 - May 2015
Sr. Technical Support Engineer

Support for Pivot3 converged VDI and Storage/Surveillance offerings and creating in-house tooling to enhance customer support experience

- Developed and deployed inventory tracking tool to ensure proper tracking and recovery of customer demo hardware
- Developed and deployed secure support contract lookup tool to allow external front line call center to identify expired support contracts, leading to 90% reduction in after-hours on-call engagements

Education

Western Governors University March 2012
Cybersecurity and Information Assurance Master of Science

DeVry University October 2015
Networking and Communications Management Bachelor of Science

Speaking Engagements

Defcon 32 DemoLabs Automated Control Validation With Tommyknocker	Aug 2024	**RMISC '24** Automated Control Validation With Tommyknocker	June 2024
Defcon 31 DemoLabs Build Inspector - A modern Javert on the trail of CI/CD Anomalies and Intruders	Aug 2023	**BlackHat USA '23 Arsenal** Build Inspector Open Source	Aug 2023
RMISC '23 Build Inspector Open Source	June 2023		