



# Vulnerability Research Labs

## Software Engineer (Python, Docker, CI/CD)

Here at Vulnerability Research Labs we have spent more than a decade becoming a technical leader in cyber security. We became a leader in the field because we believe in our mission – to be at the forefront of cyber security and deliver unparalleled capabilities that solve our customer’s hardest problems.

We’re currently seeking a full-time Software Engineer (Python, Docker, CI/CD) in our Columbia, MD office. The position is part of our internal software tools team. This team designs, implements, and maintains automated release, test, and deployment tools and frameworks with the goal of minimizing manual test and deployment processes across the suite of VRL tools. The position will follow standard software development methodologies and work directly with other development teams to understand their requirements and implement DevOps solutions to fit their needs using in-house and third-party tools. This position often integrates into other development projects to help solve test and DevOps related challenges.

### Your Day-to-Day at Vulnerability Research Labs:

- Build and maintain internal tools, automated frameworks, and environments for other software development teams
- Interact with a diverse IT infrastructure, networks, OSes, and distributed software architectures
- Champion initiatives to continually improve processes, product quality, and tools

### Responsibilities:

- Design and develop internal tooling for use within the organization by developers and QA
- Implement automated release, test, and deployment tools, practices, and frameworks
- Develop and maintain enterprise-scale products, tools, and libraries to support the software development lifecycle of other internal- and customer-products
- Support automated deployment of virtualized testing and development infrastructure
- Design, develop, debug, and/or improve automated CI/CD pipelines
- Identify, prevent, and remediate defects in products and services on a continuous basis
- Analyze the requirements of complex development, and heterogeneous production environments
- Keep up with industry best practices for software development and infrastructure management

### Job Requirements and Qualifications:

- Bachelor of Science in Computer Science or similar from an accredited university
- 2+ years’ experience with:
  - Python software development with full object-oriented programming (OOP) designs
- OR
- 2+ years' experience with software development and design in another OOP language AND
- 1+ year’s experience in total between all of the following:
  - Configuration Management tools (e.g., Ansible, Terraform)
  - Virtualization/Cloud technologies (e.g., vSphere/ESXi, Docker, Kubernetes)
  - Software Build Systems (e.g., make/CMAKE/MSBuild, Gitlab CI/CD)
- Demonstrated ability to context switch between vastly different tasks in a relatively short amount of time
- This position may require being fully vaccinated against COVID-19

### Range of Tools, Technologies and Frameworks Encompassed in Responsibilities:

- Linux, Windows, and Android setup and configuration

- Cyber security concepts
- Agile methodologies, test-driven development, and CI/CD
- HTTP server technologies and REST/JSON interfaces
- Version control systems such as Git
- Networking concepts and technologies (e.g., Firewalls)
- System scripting languages (e.g., Bash, PowerShell)
- Performance monitoring technologies such as Grafana and Prometheus
- Documentation markup languages/generators (e.g., Sphinx, reStructuredText, Markdown)
- Defining, documenting, and enforcing configuration management
- Ticketing tools such as JIRA or Gitlab
- Integration systems such as Gitlab or Jenkins
- Test tools such as pytest, unittest, or similar
- Other software
  - Artifactory
  - Packer
  - DeviceFarmer/OpenSTF

**Things we like best about VRL:**

- The chance to work with the best in the business
- Solving hard problems
- A strong focus on learning and career development including conference and training opportunities
- Most of all: an interesting and challenging workplace that takes care of its employees

Alternate Job Titles: DevOps Engineer, Software Engineer in Test

*VRL is an Equal Opportunity/Affirmative Action employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, or veteran status, or any other protected class*

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