# SHIVAM SARASWAT

### **Product Security Engineer**

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( blog.shivamsaraswat.com

Bengaluru, Karnataka
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### **EXPERIENCE**

shivamsaraswat.com

### Security Engineer

#### **Tekion**

August 2024 - Ongoing

Bengaluru, Karnataka

- Architecting DevSecOps Pipelines: Architected and implemented comprehensive DevSecOps security scanning pipelines across 2,000+ production repositories, integrating Semgrep SAST, SCA, Container Scanning (Trivy, Dockle), Dockerfile Scanning (Hadolint), and Secret Scanning (Gitleaks).
- DevSecOps Pipelines Migration: Successfully executed largescale migration from legacy compliance pipelines to GitLab's Pipeline Execution Policy for 2000+ production repositories, modernizing security scanning processes while ensuring zero production disruption.
- Pipeline Optimization: Enhanced DevSecOps pipeline templates through systematic troubleshooting and developer feedback, streamlining security scanning workflows and improving developer experience with optimized configurations.

# Product Security Engineer

#### **IKEA**

🗖 April 2023 - August 2024

- Bengaluru, Karnataka
- Architecting Security Solution & Deployment: Engineered Heimdall, an in-house Automated Web and API Security Monitoring Solution, slashing external engagement costs by 20% through improved responsible disclosure programs. Orchestrated cloud deployment using GitHub Actions, Cloud Run, and Artifact Registry, ensuring seamless functionality.
- SSDLC Automation & Integration: Key architect for developing "Argos", an organization-wide proactive automated SSDLC maturity model. This includes one-click enablement via platform engineering, instant on-demand security assessment, security maturity score, actionable insights for better decision-making and automated secure template integration for developers.
- Collaborative Innovation: Worked with Engineering teams to pioneer R&D efforts aimed at significantly strengthening IKEA's product security infrastructure, integrating advanced tools into CI/CD pipelines.
- Pioneering Exploration (PoC): Collaborated cross-functionally to prototype and implement scalable solutions, driving a cloud-first architecture.
- Automated Vulnerability Management: Streamlined the extraction of critical issues from Google Security Command Center (SCC) with real-time Slack notifications and centralized dashboard visualization, optimizing response time, triaging, followups, and patching.

### **EDUCATION**

B Tech CSE (Specialization in Cyber Security)

**GLA University, Mathura** 

● 8.25 CGPA

## **SKILLS**

Cyber Security: DevSecOps, Application Security, Security Automation, Cloud Security, OWASP Top 10, Secure Code Review, Vulnerability Management, Policy as Code, Pentesting (Web, Network), Threat Modelling

**SAS:** Semgrep, CodeQL (GHAS), GitLab Advanced SAST, Bandit

**SCA:** Dependabot (GHAS), Gemnasium (GitLab)

**Secret Scanning:** Gitleaks, TruffleHog, GHAS, Talisman

**DAST:** Nuclei, Nuclei Templates, OWASP Zap

Container Security: Dockerfile Scanning (Hadolint), Container Scanning (Trivy, Dockle)

Scripting: Python, Go, Bash, PowerShell

Cloud Platform: GCP, AWS

**CI/CD:** GitHub Actions, GitLab CI/CD **Containers & Orchestration:** Docker,

Database: MongoDB

Kubernetes (K8S)

Version Control: Git, GitHub, GitLab,

BitBucket

OS: Linux, MacOS, Windows API Tools: Swagger, Postman

Security Tools: Burp Suite, Wireshark,

Nmap, Nessus

Monitoring Tools: Elasticsearch (ELK)

# **ACCOMPLISHMENTS**



# Best Security Product of the Year 2023

Received recognition at the 2nd Annual Cyber Security Excellence Awards by Quantic India

- Operationalize Cloud Security: Pioneered Google Cloud access control policies and best practices. Led cloud vulnerability management, prioritizing fixes, detecting false positives, and reporting to stakeholders. Visualized vulnerabilities on an internal dashboard to deduce trends and make informed decisions for mitigation.
- **Detailed Documentation**: Thoroughly documented Cloud Security findings investigations and research.
- Shadow IT Asset Management: Resolved numerous DNS dangling issues associated with shadow IT assets, which were critical in preventing potential subdomain takeovers.
- Bug Bounty Program Management: Investigated and resolved multiple issues reported by external Security Researchers on the Bug Bounty program.
- Comprehensive Security Assessments: Conducted regular Pentesting, Threat Modeling, and Secure Code Reviews for Internal Products.
- Security Awareness: Delivered 10+ engaging sessions with actionable cybersecurity strategies to non-security co-workers.

# Security Automation Engineer

#### **BreachLock**

March 2022 - April 2023



- Cyber Threat Research & Automation Code: Researched on the latest cybersecurity threats and devised automation code for Vulnerability Scanners and External Attack Surface Management (EASM) platform.
- Vulnerability Scanner Enhancement: Enhanced the effectiveness of the Automated Vulnerability Scanner by meticulously analyzing and incorporating insights from Pentester-discovered vulnerabilities, ensuring continuous improvement.
- Modular Security Automation Code: Developed modular and efficient code for security automation plugins, optimizing functionality and scalability while ensuring comprehensive documentation.
- Scrum-based Collaboration: Engaged in a scrum-based environment, leveraging tools like Jira, Bitbucket, and Confluence to foster efficient collaboration and streamline project management processes.
- Test Case Development: Created comprehensive test cases using Pytest, ensuring robust and reliable performance of the Scanner.
- Microservice API Development: Designed and implemented Backend Microservice APIs using Swagger, Postman, Flask, and MongoDB, contributing to the creation of a resilient and responsive ecosystem for security tools.



# InnerSource Hackathon Runner Up

Achieved 1st runner up in IKEA's InnerSource Hackathon 2024



# Speaker at Disobey 2024 Conference

Selected to present on – "Guarding Your Digital Realm: Heimdall – Your Shield in the World of Web and API Security" at the largest Nordic Security Event in Helsinki, Finland



### Top 1% (God Rank) on TryHackMe

Completed 120+ rooms on topics like DevSecOps, Pentesting, CTFs, OWASP Top 10, Nmap, Wireshark, Nessus, etc.

### **PUBLICATIONS**

### Conference Proceedings

A. Tiwari, S. Saraswat, U. Dixit, and S. Pandey, "Refinements in zeek intrusion detection system," in 2022 8th International Conference on Advanced Computing and Communication Systems (ICACCS), vol. 1, 2022, pp. 974–979. DOI: 10.1109/ICACCS54159. 2022.9785047.

# **CERTIFICATIONS**

- **EC-Council** Certified Ethical Hacker (Practical)
- IBM Cyber Security Graduate
- Internshala Ethical Hacking
- PentesterLab Unix Badge
- Fortinet NSE 1 Network Security Associate

## **LANGUAGES**

English Hindi

