SHIVAM SARASWAT

Product Security Engineer

@ shivamsaraswat044@gmail.com ☎ +91-9084280701 📍 Bengaluru, Karnataka
🌐 shivamsaraswat.com 💼 shivamsaraswat ⌨ shivamsaraswat

PROFESSIONAL SUMMARY

Experienced DevSecOps and Cybersecurity professional with more than 3 years of expertise in architecting enterprise-grade security solutions and driving cloud-native implementations. Skilled at building and optimizing secure pipelines for large-scale environments, creating innovative in-house security tools, and implementing cloud security best practices. Recognized speaker at global security events and recipient of industry awards for excellence in product security. Proven ability to reduce security risks, streamline compliance processes, and enhance developer productivity through innovative tools and workflows. Committed to bridging the gap between development and security to create resilient, scalable, and efficient systems.

EXPERIENCE

Information Security Engineer 3

PayPal

📅 April 2025 – Ongoing 📍 Bengaluru, Karnataka

- **Container Security Framework & Policy Development**: Defined and rolled out a unified container—scanning framework and governance model—standardizing vulnerability checks for Docker images across all development teams—while designing and enforcing JFrog Xray policies (severity gates, CVE exemptions, whitelists) to ensure 100% compliance, reduce manual exception handling, and accelerate remediation cycles.
- **CI/CD—Native Security Enforcement**: Embedded JFrog Xray container security scans into Harness CI/CD pipelines at both build and deploy stages, automating checks that block non-compliant images and accelerating vulnerability detection.
- **Container Scanning Tool Evaluation**: Led a comparative analysis of industry tools (e.g., JFrog Xray, Trivy, Grype) against criteria like detection accuracy, performance impact, cost, and API support—piloting the top choice to boost scan throughput without affecting pipeline SLAs.

Security Engineer

Tekion

📅 August 2024 – March 2025 📍 Bengaluru, Karnataka

- **Architecting DevSecOps Pipelines**: Architected and implemented comprehensive DevSecOps security scanning pipelines across 2,000+ production repositories, integrating SAST, SCA, Secret Scanning, Container Scanning and Dockerfile Scanning, resulting in 40% reduction in security vulnerabilities.
- **DevSecOps Pipelines Migration**: Led the migration of 2,000+ production repositories to GitLab's Pipeline Execution Policy, ensuring a seamless transition and zero production disruption.
- **Pipeline Optimization & Developer Collaboration**: Reduced pipeline execution time by 35% through workflow and configuration enhancements, while refining pipeline templates based on systematic troubleshooting and developer feedback to improve overall efficiency and developer experience.

EDUCATION

B.Tech in Computer Science and Engineering (Cyber Security)

GLA University, Mathura

📅 May 2022 📍 8.25 CGPA

SKILLS

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

Security Tools & Platforms:
- **SAST:** Semgrep, CodeQL (GHAS), Bandit
- **SCA:** Dependabot, Renovatebot
- **Secret Scanning:** Gitleaks, TruffleHog, GHAS, Talisman
- **DAST:** Nuclei, Nuclei Templates, OWASP Zap
- **SBOM:** Syft, Dependency-Track
- **Container Security:** JFrog Xray, Trivy, Hadolint
- **Security Testing:** Burp Suite, Wireshark, Nmap, Nessus
- **Monitoring:** Elasticsearch, New Relic

Development & Infrastructure:
- **Scripting:** Python, Bash, PowerShell
- **Cloud Platforms:** GCP, AWS
- **CI/CD:** GitHub Actions, GitLab CI/CD, Harness CI/CD
- **Containers & Orchestration:** Docker, Kubernetes (K8S)
- **Version Control:** Git, GitHub, GitLab, BitBucket
- **Database:** MongoDB
- **API Tools:** Swagger, Postman
- **OS:** Linux, MacOS, Windows

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, reducing 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)**: Led cross-functional teams in prototyping and implementing cloud-first security architecture, resulting in 30% improvement in security posture.

- **Automated Cloud Vulnerability Management & Visualization**: Built an end-to-end triage and notification system with centralized dashboard for Google Security Command Center (SCC) that slashed critical-issue response time by 40%.

- **Governance, Controls & Documentation**: Architected Google Cloud access-control policies and optimized vulnerability workflows, while maintaining comprehensive investigation and research documentation to drive informed mitigation decisions.

- **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.

- **Security Awareness**: Delivered 10+ engaging sessions with actionable cybersecurity strategies to non-security co-workers.

Security Automation Engineer

BreachLock

📅 March 2022 - April 2023   📍 Noida, UP

- **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.

- **Security Automation & Testing**: Developed modular and efficient security automation plugins with comprehensive documentation, and created robust test cases using Pytest to ensure optimal functionality, scalability, and reliability of the Scanner.

ACCOMPLISHMENTS

🏆 **Best Security Product of the Year**
Received recognition at the 2nd Annual Cyber Security Excellence Awards 2023 by Quantic India

🏆 **Hackathon Runner Up**
Achieved 1st runner up in IKEA's InnerSource Hackathon 2024

🎤 **Speaker at Disobey 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 - 2024

📈 **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
- **PentesterLab -** Unix Badge
- **Fortinet -** NSE 1 Network Security Associate

LANGUAGES

English
Hindi

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