SWASTIK MUKHERJEE

Senior Product Security Engineer

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EXPERIENCE

Senior Product Security Engineer

IKEA

☐ Jan 2023 - Ongoing

Bangalore, INDIA

- SSDLC Automation & Integration : Key Architect for developing "Argos" for creating organization wide Proactive Automated SSDLC Maturity Model with one click enablement through Platform Engineering, instant on-demand security assessment, Security Maturity Score, Actionable Insights and Automated Secure Template integration for developers.
- Streamlining Product Security: Key Architect for automated Security Control verification and status validation of the same, scoped across Organization wide 900+ Software Products and streamlined processes for Threat Modelling, SSDLC and Penetration Testing resulting in massive speed up for Product Security Life cycle Management.
- Crafted Container Security Life-Cycle Management: Designed Container Security Life-Cycle, streamlined process, developed solution and strategised to roll out this to product delivery stakeholders with ultimate shift-left approach.
- Shifted From Routines to Strategy: Played a pivotal role to Unify & centralize visibility for all security tools findings, distill & deduplicate vulnerabilities to a single actionable report and ensured seamless collaboration between development, security, and leadership team and shifted the focus more on strategy, not routines.
- Architected Software Security Transformation : Played a key role to research, audit, identify and procure GitHub Advanced Security for SAST, SCA & Secret Scanning and migrated 9000+ repositories from SonarQube, Blackduck & Polaris to finally produce vulnerability prioritization, insightful reports, dashboard, trends and inform relevant stakeholders with automated notification.
- Architecting and Leading the Security Champion Program: Initiated and implemented a strategic security program, collaborating with cross-functional teams to embed security controls. This effort reduced vulnerabilities, improved incident response, raised security awareness, increased stakeholder engagement and accelerated organizational Product Security Program with great
- Operationalize Cloud Security Initiatives : Involved in accumulating cloud vulnerabilities, prioritize remediation, finding False-Positives, communicate to relevant stakeholders, visualize in internal dashboard, deduce trends and take informed decision for cloud vulnerability mitigation.
- Cross-Cloud Compliance & Standardization : Key Initiator for the development of Threat Modelled, Compliant and Secure Terraform Modules for GCP resources.

EDUCATION

M. Tech in Distributed & Mobile Computing

Jadavpur University

June 2019

■ 8.67 CGPA

B. Tech in Computer Science **MAKAUT University**

June 2017

8.26 CGPA

SKILLS

Cloud Platform: GCP. Azure & AWS CI/CD: Github Actions, Atlassian Bamboo. Jenkins

Container & Orchestration: Docker. K8S, Trivy, Hadolint, Docker-bench, kube-bench

laC: Terraform, TFSec, CaC: Ansible

Scripting: Python, Shell

SCM: Git, GitHub, BitBucket, Azure Re-

SAST/SCA: CodeQL, Dependabot,

SonarQube, Blackduck, GHAS

Secret Scanning: Talisman, GHAS

DAST: Nuclei templates Threat Modelling: OPlane

ACHIEVEMENTS



Best DevSecOps Leader of the Year 2023

Received recognition at the 2nd Annual India DevOps Show by Quantic Business Media Pvt. Ltd.



IKEA Data Hero Gold Medalist 2024

Achieved first place in the oneday Data Analysis inter IKEA Hackathon.

Senior DevSecOps Engineer

Honeywell Technology Solutions

- May 2022 Mar 2023
- Bangalore, India
- Developed Templates to provision automated DevSecOps Pipelines with integrated security tool for Building .NET Xamarine Application, Java web application, Kernel build for Embedded Application.
 - **Tools/Languages**: Bamboo CI/CD Pipeline, Azure VMs, Sonar-Qube, Blackduck, Coverity, BitBucket, Python.
- Created Azure Workflow RunBooks to automate infrastructure orchestration scaled through 1500+ Azure Resources to increased cost efficiency.
 - Tools/Languages: Powershell, Azure ARM Template.
- Configured Quality Gates to maintain Container Image Security Benchmark across 200+ DevOps Pipeline.
 Tools/Languages: Python, Twistlock
- Deployed Python script to send notification to Teams channel for 200+ Pipelines.
 - **Tools/Languages**: Powershell, Azure ARM Template.
- Provisioned SAST Linters and Secret Scanning hooks to developers IDEs, enterprise Repo to achieve ultimate security shift left.
 Tools/Languages: SonarQube Linter, Talisman
- Developed Terraform templates to deploy Azure resources. **Tools/Languages**: Terraform
- Confidently managed, updated, maintained and orchestrated 300+ Bamboo CI/CD Windows & Linux Agents (Azure VMs) for smooth build, release & deploy of software artifacts.
 Tools/Languages: Terraform, Ansible, Azure
- Worked closely with Dev, QA, Cyber team to troubleshoot, collaborate and integrate solution to extend & optimize the pipeline capabilities.

DevOps Engineer

Tata Consultancy Services

- ☐ Jun 2019 May 2022
- Kolkata, India
- Hands On experience in Linux System Administration (RHEL 6/7 | OEL 6/7 | Ubuntu).
- Developed Ansible Playbooks for Configuration Managements scoped across 3000+ Dev, QA and Prod Servers.
- Developed Automation scripts using Python and Shell Script to automate repetitive administration tasks.
- Ensured Ad-hoc Scaling, Resource Creation & High Availability Services in AWS Cloud & Oracle on-prem Cloud Platform.
- Automated, managed and maintained patching pipeline through Jenkins, Git and other Build Tools.
- Participated in Multi Team Collaboration for driving DR Drills.
- Participated in patching on-prem clusters Ensuring Delivery under minimal downtime.
- Performed Continuous Monitoring, Security Patch Apply, Network Management, Ad-hoc vulnerability Assessment and Mitigation, Alert management and incident response.
- Took active part for project migration from Oracle On Premise infrastructure to Azure & AWs Environment.
- Perfomed Creating, updating and Maintaining KEDB and Risk Registers.



Inner-Source Hackathon Runner-Up 2024

Achieved first runner-up place in inter IKEA inner source Hackathon.



Hub Ambassador

Selected as the Hub Ambassador for India to feature in IKEA's branding video, showcasing 'A Day in the Life of an IKEA Employee."

CERTIFICATIONS

- AZ900 : Microsoft Certified: Azure Fundamentals.
- **AZ104**: Microsoft Certified: Azure Administrator Associate.
- **Scrum Master**: SAFe Certified Scrum Master (5.1)

PUBLICATIONS

- Published Research paper on Performance Enhancement in Big Data Handling under IEEE.
- Published Research paper on Optimal Cloud Load Balancing Algorithm on Springer ACCS.
- Published Research paper on Load Balancing and Auto-scaling in Cloud Elastic Environment on IOS Press.
- Published Book Chapter on An approach towards survey and analysis of cloud robotics in IGI Global.
- Published Book Chapter on Examining of QoS in Cloud Computing Technologies and IoT Services in IGI Global.

LANGUAGES

English Bengali Hindi

