Mahendra Thanniru

📞 +919912933367 ✉ mahendra.thanniru@outlook.com in linkedin.com/in/mah1ndra ⊙ github.com/mah1ndra

- Securing 15+ payment services with 500MM active customers at Amazon Pay.

- Led the Security Champion program for the Payments organization, promoting security best practices through comprehensive training on threat modeling and secure design principles.

- Developed tooling to detect drift in the API attack surface and generate alerts to validate and maintain its security posture.

EXPERIENCE

Amazon   Aug 2022 – Present
Security Engineer – Amazon Pay   *India*

- Lead security engineer, responsible for secure product releases for 15+ services part of Core Payments org.
- Leveraged the MITRE ATT&CK framework to conduct threat modeling, identifying and addressing critical security design risks, reducing potential attack surface by 10% and enhancing system resilience against 5 attack scenarios..
- Developed an endpoint enumeration solution that identified and alerts about APIs live in production without a security review.
- Designed and implemented a secure secret-sharing mechanism using PGP encryption for third-party integrations, enabling two production payment services to establish .

VMware   Feb 2021 – Aug 2022
Security Engineer – Tanzu Platform   *India*

- Mitigated 10+ Critical vulnerabilities at the design phase through threat modeling across multiple products and helped in reducing the attack surface by 40% with a long-term threat mitigation plan.
- Through security code review reported 20+ critical and high severity vulnerabilities affecting multiple on-prem and SaaS products. Worked closely with the developer to provide defense in depth mitigation to future proof the product and limit the attack's blast radius.
- Taken ownership of hardening CI/CD, Kubernetes environments with strict RBAC policies and security context for all product pipelines increased supply chain security by 30%.

Opentext   May 2019 – Feb 2021
Software Engineer – iHub   *India*

- Designed and constructed a diverse array of frontend chart components for the information hub, offering customers a 20% increase in flexibility for data visualization options and choices.
- Deployed containerization for multiple frontend services, improving latency by 10% and enhancing the user experience.

PROJECTS

Dependency Confusion | *Golang, docker, linux*

- Developed a solution to detect and alert on dependency confusion vulnerabilities in organization-owned open-source projects by parsing package dependencies and verifying ownership in public artifact repositories, securing 90% of the organization's OSS portfolio.

URLEnumeration | *AWS, IAM, docker, python*

- Developed a Python automation script that periodically parses API definitions within the codebase and alerts on any detected API drifts.

PROFESSIONAL ACCOMPLISHMENTS

- **Certifications:**   AWS Developer Associate, OSCP (Security), CKAD, HCNA

- Awarded CVE-2022-1553 for identifying an authorization bypass vulnerability that enabled leaking sensitive information in an open-source software (OSS) CMS .

- Contributed to FOSSASIA's Meilix project, enhancing Linux OS customization features and fixing critical bugs to improve user experience and accessibility for the open-source community.

- Awarded multiple Accolades for identifying and helping to patch multiple Critical and High severity vulnerabilities and unblocking product release.

EDUCATION

B V Raju Institute of Technology   May 2020
Bachelor of Technology in Computer Science   *India*