

DAILY DIARY

INDUSTRIAL TRAINING (TR-104)

SAFEAEON INC., MOHALI

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR

Six Months of Industrial Training

at

(From 09/01/2023 to 09/05/2023)

SUBMITTED BY

NAME: ARSHDEEP SINGH

UNIVERSITY ROLL NO. 2004693



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

**GURU NANAK DEV ENGINEERING COLLEGE, GILL PARK, GILL
ROAD, LUDHIANA**

DAILY DIARY OF SIX MONTHS INDUSTRIAL TRAINING

I, **Arshdeep Singh** with University Roll no.**2004693** final year 8th semester student from B.Tech.(Computer Science & Engineering) started my internship at SafeAeon Inc. on 09th January 2023 and this is account of what I did during up until now.

January 9th-12th:

I focused on networking devices and topologies. I studied several types of network devices such as routers, switches, and access points, understanding their roles in managing and directing network traffic. Additionally, I delved into various network topologies, including bus, star, ring, and mesh, exploring their advantages and disadvantages in different network setups.

January 13th -15th:

Continuing my exploration of networking concepts, I delved into NAT (Network Address Translation), PAT (Port Address Translation), DNS (Domain Name System), and DHCP (Dynamic Host Configuration Protocol). I learned how NAT and PAT facilitate the translation of IP addresses and ports to enable communication between private and public networks. Additionally, I studied DNS, which translates domain names to IP addresses, and DHCP, which automates the assignment of IP addresses to network devices.

January 16th – 18th:

Today, I focused on firewalls and their significance in network security. I learned about several types of firewalls, including packet-filtering firewalls, stateful inspection firewalls, and application-level gateways. Understanding how firewalls monitor and control network traffic helped me grasp their role in preventing unauthorized access and protecting networks from various threats.

January 19th – 22nd:

Continuing my exploration of cybersecurity, I delved into cryptography. I studied various cryptographic algorithms, such as symmetric and asymmetric encryption, hashing, and digital signatures. I learned how cryptography plays a crucial role in ensuring confidentiality, integrity, and authenticity of data in transit and at rest.

January 23rd – 25th:

Today, I focused on access control mechanisms and authentication protocols. I explored several types of access control models, including discretionary, mandatory, and role-based access

control. Additionally, I studied authentication methods such as passwords, biometrics, and multi-factor authentication, understanding their strengths and weaknesses in verifying the identity of users.

January 26th – 30th:

Today, I delved into the world of cyber-attacks and exploits. I learned about common attack techniques such as phishing, malware, DDoS (Distributed Denial of Service), and social engineering. Understanding these attack vectors helped me recognize the importance of implementing robust security measures to safeguard networks and systems.

February 1st - 3rd:

Continuing my cybersecurity journey, I focused on the OWASP (Open Web Application Security Project) Top 10. I familiarized myself with the top ten web application vulnerabilities identified by OWASP, including injection attacks, cross-site scripting (XSS), and insecure direct object references. Gaining knowledge of these vulnerabilities will enable me to build more secure web applications in the future.

February 4th – 8th:

My team lead commenced my training by providing an overview of the security environment. We discussed the current threat landscape, emerging trends in cyber-attacks, and the importance of staying updated on the latest security practices to mitigate risks effectively.

February 9th – 10th:

During today's training session, I focused on Data Loss Prevention (DLP). My team lead explained the significance of implementing DLP measures to safeguard sensitive data. We explored different DLP techniques, including data classification, encryption, access controls, and monitoring solutions.

February 11th – 15th:

Continuing my training, I delved into the concepts of Indicators of Compromise (IOC) and Indicators of Attack (IOA). I learned how to identify potential security incidents and ongoing attacks by analyzing various indicators such as IP addresses, domain names, file hashes, and behavioral patterns.

February 16th - 22nd:

In today's training, my team lead introduced me to Common Vulnerabilities and Exposures (CVE) and Common Vulnerability Scoring System (CVSS). We discussed the significance of CVE as a publicly accessible database of known vulnerabilities, and how CVSS provides a standardized scoring system to assess vulnerability severity. This knowledge will assist me in understanding and prioritizing vulnerabilities effectively.

February 23rd - 28th:

Training focused on penetration testing (pen testing). I learned about the importance of conducting controlled tests to identify vulnerabilities in systems and applications. We discussed the different phases of a pen test, including reconnaissance, vulnerability assessment, exploitation, and reporting.

March 1st – 7th:

Today, my team lead introduced me to hybrid SIEM (Security Information and Event Management). We discussed how hybrid SIEM combines the capabilities of both on-premises and cloud-based SIEM solutions to provide comprehensive security monitoring, log management, and threat detection.

March 8th – 14th:

During today's training session, I focused on Email Security. My team lead emphasized the importance of securing email communications, preventing phishing attacks, and implementing robust spam filtering and encryption measures. I learned about various email security technologies and best practices to protect sensitive information.

March 15th – 21st:

Continuing my training, I delved into Endpoint Detection and Response (EDR). We discussed the significance of EDR solutions in identifying and responding to advanced threats and malicious activities at the endpoint level. I learned about the capabilities of EDR tools in monitoring and securing endpoints, detecting, and containing threats, and conducting incident response.

March 22nd -28th:

In today's training, I explored Vulnerability Management. My team lead explained the importance of regularly identifying, assessing, and prioritizing vulnerabilities in systems and applications. I learned about vulnerability scanning tools, vulnerability assessment methodologies, and the importance of patching or mitigating identified vulnerabilities.

March 29th – 30th:

Today's training session focused on Patch Management. We discussed the importance of timely patching to address software vulnerabilities and reduce the risk of exploitation. I learned about patch management processes, including vulnerability assessment, patch testing, deployment, and monitoring.

April 1st – Present:

Status	Priority	Created Date	Reporting Agent	Resolving Agent
Closed ▾	Medium ▾	27 Mar, 2023 2:20 AM	Arshdeep Singh	
Open ▾	Low ▾	18 Mar, 2023 6:19 AM	Arshdeep Singh	-
Closed ▾	Medium ▾	03 Apr, 2023 2:40 PM		Arshdeep Singh
Closed ▾	Low ▾	03 Apr, 2023 8:32 AM	Arshdeep Singh	Arshdeep Singh
Closed ▾	Low ▾	03 Apr, 2023 7:29 AM	Arshdeep Singh	Arshdeep Singh
Closed ▾	Low ▾	04 Apr, 2023 2:25 AM	Arshdeep Singh	
Closed ▾	Medium ▾	02 Apr, 2023 1:53 PM		Arshdeep Singh
Closed ▾	Low ▾	03 Apr, 2023 1:46 AM		Arshdeep Singh
Closed ▾	Medium ▾	01 Apr, 2023 8:24 AM		Arshdeep Singh
Open ▾	Low ▾	04 Apr, 2023 5:20 AM	Arshdeep Singh	-
Closed ▾	Low ▾	01 Apr, 2023 2:27 AM	Arshdeep Singh	
Closed ▾	Low ▾	01 Apr, 2023 2:53 AM	Arshdeep Singh	Arshdeep Singh
Closed ▾	Medium ▾	31 Mar, 2023 6:13 PM		Arshdeep Singh
Closed ▾	Low ▾	01 Apr, 2023 8:31 AM		Arshdeep Singh
Closed ▾	Medium ▾	31 Mar, 2023 7:56 AM	Arshdeep Singh	Arshdeep Singh
Closed ▾	Medium ▾	31 Mar, 2023 5:02 AM	Arshdeep Singh	Arshdeep Singh
Closed ▾	Low ▾	30 Mar, 2023 7:15 PM		Arshdeep Singh
Closed ▾	Medium ▾	28 Mar, 2023 3:22 AM	Arshdeep Singh	Arshdeep Singh

Status	Priority	Created Date	Reporting Agent	Resolving Agent
Open ▾	■ Low ▾	12 May, 2023 3:04 AM	Arshdeep Singh	-
Closed ▾	■ Medium ▾	06 May, 2023 11:24 PM		Arshdeep Singh
Closed ▾	■ Medium ▾	06 May, 2023 9:19 AM		Arshdeep Singh
Closed ▾	■ Low ▾	07 May, 2023 2:21 AM	Arshdeep Singh	Arshdeep Singh
Closed ▾	■ Low ▾	06 May, 2023 4:01 AM	Arshdeep Singh	Arshdeep Singh
Closed ▾	■ Low ▾	06 May, 2023 12:40 AM		Arshdeep Singh
Closed ▾	■ Low ▾	05 May, 2023 3:12 AM	Arshdeep Singh	Arshdeep Singh
Closed ▾	■ Medium ▾	05 May, 2023 5:10 PM		Arshdeep Singh
Closed ▾	■ Low ▾	07 May, 2023 7:17 AM	Arshdeep Singh	-
Closed ▾	■ Medium ▾	07 May, 2023 3:17 AM	Arshdeep Singh	Arshdeep Singh
Closed ▾	■ Low ▾	06 May, 2023 8:21 AM		Arshdeep Singh
Closed ▾	■ Low ▾	06 May, 2023 8:22 AM		Arshdeep Singh
Closed ▾	■ Low ▾	08 May, 2023 7:11 AM		Arshdeep Singh
Closed ▾	■ Low ▾	05 May, 2023 1:08 AM		Arshdeep Singh
Closed ▾	■ Low ▾	08 May, 2023 7:10 AM		Arshdeep Singh
Closed ▾	■ Low ▾	08 May, 2023 3:11 AM	Arshdeep Singh	Arshdeep Singh
Closed ▾	■ Low ▾	08 May, 2023 1:37 AM	Arshdeep Singh	Arshdeep Singh
Closed ▾	■ Low ▾	07 May, 2023 2:48 AM	Arshdeep Singh	Arshdeep Singh
Closed ▾	■ Low ▾	05 May, 2023 9:18 AM	Arshdeep Singh	Arshdeep Singh
Closed ▾	■ Medium ▾	05 May, 2023 3:48 AM	Arshdeep Singh	Arshdeep Singh

Status	Priority	Created Date	Reporting Agent	Resolving Agent
Open ▾	■ Low ▾	23 May, 2023 2:54 AM	Arshdeep Singh	-
Open ▾	■ Low ▾	23 May, 2023 6:44 AM	Arshdeep Singh	-
Closed ▾	■ Low ▾	26 May, 2023 2:19 AM		Arshdeep Singh
Closed ▾	■ Low ▾	26 May, 2023 2:41 AM		Arshdeep Singh
Closed ▾	■ Low ▾	26 May, 2023 2:41 AM		Arshdeep Singh
Closed ▾	■ Low ▾	26 May, 2023 2:38 AM		Arshdeep Singh
Closed ▾	■ Low ▾	26 May, 2023 2:35 AM		Arshdeep Singh
Closed ▾	■ Low ▾	22 May, 2023 6:38 PM		Arshdeep Singh
Closed ▾	■ Medium ▾	22 May, 2023 4:54 PM		Arshdeep Singh
Closed ▾	■ Low ▾	23 May, 2023 3:57 AM	Arshdeep Singh	Arshdeep Singh
Closed ▾	■ Medium ▾	23 May, 2023 12:15 AM		Arshdeep Singh
Closed ▾	■ Low ▾	23 May, 2023 8:08 AM	Arshdeep Singh	
Closed ▾	■ Low ▾	22 May, 2023 8:50 AM	Arshdeep Singh	Arshdeep Singh
Closed ▾	■ Low ▾	22 May, 2023 7:50 AM	Arshdeep Singh	Arshdeep Singh
Closed ▾	■ Low ▾	22 May, 2023 7:34 AM	Arshdeep Singh	Arshdeep Singh
Closed ▾	■ Low ▾	21 May, 2023 2:10 AM	Arshdeep Singh	Arshdeep Singh
Closed ▾	■ Low ▾	20 May, 2023 11:21 AM		Arshdeep Singh
Closed ▾	■ Low ▾	20 May, 2023 3:02 AM	Arshdeep Singh	Arshdeep Singh
Closed ▾	■ Low ▾	20 May, 2023 2:58 AM	Arshdeep Singh	Arshdeep Singh

Status	Priority	Created Date	Reporting Agent	Resolving Agent
Closed ▾	■ Low ▾	28 May, 2023 2:49 AM		Arshdeep Singh
Closed ▾	■ Low ▾	28 May, 2023 2:29 AM		Arshdeep Singh
Closed ▾	■ Low ▾	28 May, 2023 2:35 AM		Arshdeep Singh
Closed ▾	■ Low ▾	28 May, 2023 2:30 AM		Arshdeep Singh
Closed ▾	■ Low ▾	28 May, 2023 2:20 AM		Arshdeep Singh
Open ▾	■ Low ▾	28 May, 2023 8:41 AM	Arshdeep Singh	-
Closed ▾	■ Low ▾	26 May, 2023 3:27 AM	Arshdeep Singh	Arshdeep Singh
Closed ▾	■ Low ▾	26 May, 2023 3:59 AM	Arshdeep Singh	Arshdeep Singh
Closed ▾	■ Low ▾	26 May, 2023 3:39 AM	Arshdeep Singh	Arshdeep Singh
Closed ▾	■ Low ▾	26 May, 2023 2:39 AM		Arshdeep Singh
Closed ▾	■ Medium ▾	25 May, 2023 11:24 PM		Arshdeep Singh
Closed ▾	■ Medium ▾	25 May, 2023 12:23 AM		Arshdeep Singh
Closed ▾	■ Low ▾	27 May, 2023 6:18 AM		Arshdeep Singh
Closed ▾	■ Low ▾	27 May, 2023 8:51 AM		Arshdeep Singh
Closed ▾	■ Low ▾	27 May, 2023 1:20 AM		Arshdeep Singh
Closed ▾	■ Low ▾	27 May, 2023 8:30 AM		Arshdeep Singh
Closed ▾	■ Low ▾	27 May, 2023 2:58 AM		Arshdeep Singh
Closed ▾	■ Low ▾	27 May, 2023 8:32 AM		Arshdeep Singh
Closed ▾	■ Low ▾	27 May, 2023 8:36 AM		Arshdeep Singh
Closed ▾	■ Low ▾	27 May, 2023 4:32 AM	-	Arshdeep Singh

Status	Priority	Created Date	Reporting Agent	Resolving Agent
Open ▾	■ Low ▾	11 Jun, 2023 2:29 AM	Arshdeep Singh	-
Open ▾	■ Low ▾	11 Jun, 2023 2:23 AM	Arshdeep Singh	-
Closed ▾	■ Low ▾	09 Jun, 2023 2:28 AM		Arshdeep Singh
Closed ▾	■ Low ▾	09 Jun, 2023 1:18 AM		Arshdeep Singh
Closed ▾	■ Urgent ▾	09 Jun, 2023 8:08 AM	Arshdeep Singh	Arshdeep Singh
Closed ▾	■ Low ▾	09 Jun, 2023 2:18 AM	Arshdeep Singh	Arshdeep Singh
Closed ▾	■ Low ▾	09 Jun, 2023 2:12 AM	Arshdeep Singh	Arshdeep Singh
Closed ▾	■ Low ▾	09 Jun, 2023 4:11 AM	Arshdeep Singh	
Closed ▾	■ Low ▾	09 Jun, 2023 2:38 AM		Arshdeep Singh
Closed ▾	■ Low ▾	09 Jun, 2023 2:13 AM		Arshdeep Singh
Closed ▾	■ Low ▾	09 Jun, 2023 2:13 AM		Arshdeep Singh
Closed ▾	■ Low ▾	08 Jun, 2023 2:00 PM		Arshdeep Singh
Closed ▾	■ Low ▾	08 Jun, 2023 12:46 PM		Arshdeep Singh
Closed ▾	■ Low ▾	10 Jun, 2023 7:05 AM		Arshdeep Singh
Open ▾	■ Low ▾	10 Jun, 2023 3:13 AM	Arshdeep Singh	-
Open ▾	■ Low ▾	10 Jun, 2023 3:10 AM	Arshdeep Singh	-
Open ▾	■ Low ▾	10 Jun, 2023 3:05 AM	Arshdeep Singh	-
Open ▾	■ Low ▾	10 Jun, 2023 3:01 AM	Arshdeep Singh	-
Closed ▾	■ Medium ▾	09 Jun, 2023 4:42 AM	Arshdeep Singh	
Closed ▾	■ Low ▾	05 Jun, 2023 2:25 AM	Arshdeep Singh	-

