

RUSHI MOLIYA AU2240020



# CYBER SECURITY: AWARENESS

UNDERSTANDING THREATS AND BEST PRACTICES

RUSHI MOLIYA AU2240020







# INTRODUCTION

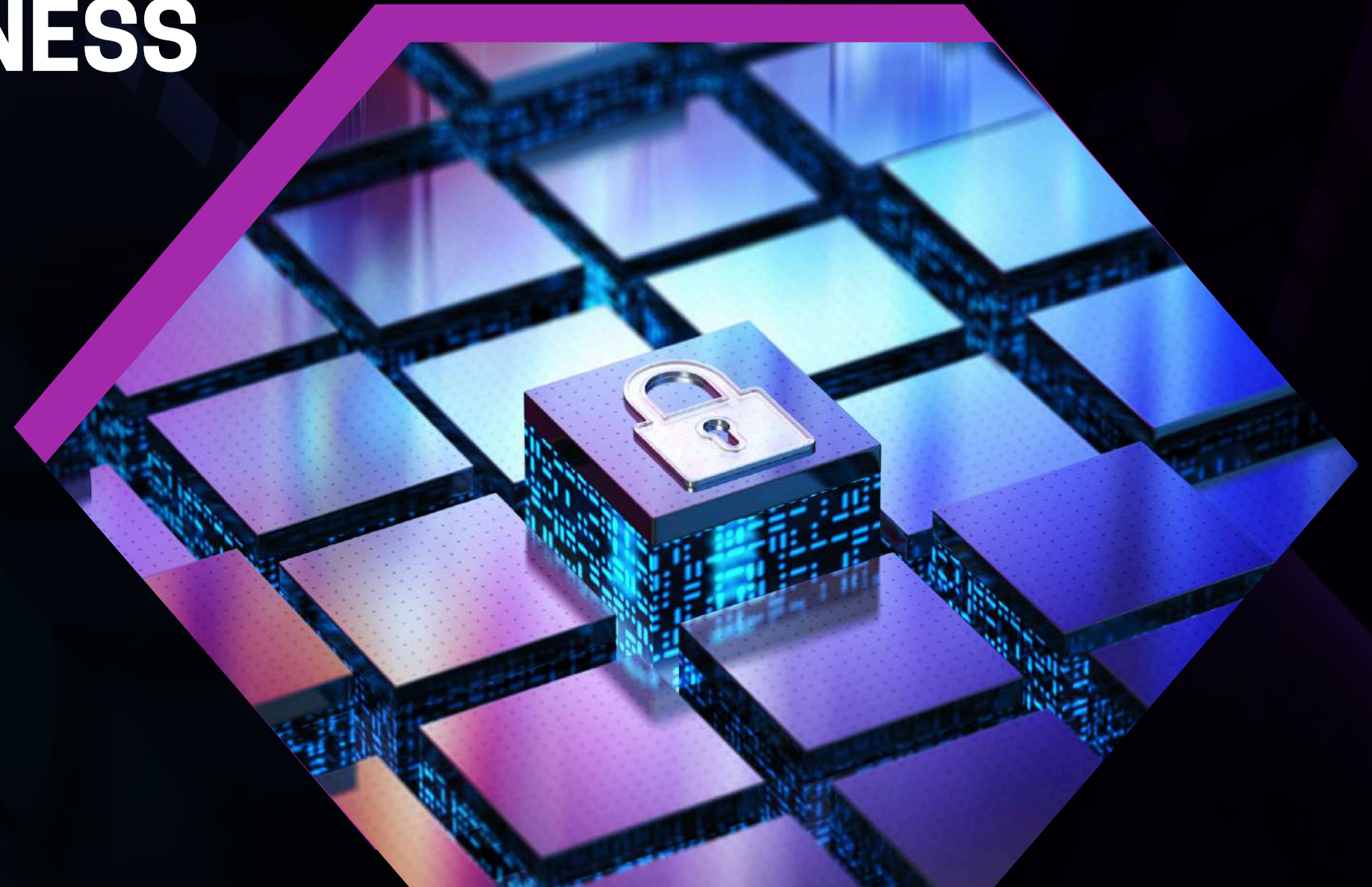
## CYBERSECURITY AWARENESS

The knowledge of cyber threats and ways to protect personal & organizational data.

Why It's Important:

- Cybercrime costs \$4.88M per breach (IBM, 2024)
- 80% of breaches result from human error (Verizon, 2022)

LEARN MORE







# MAJOR CYBERSECURITY THREATS



**PHISHING**



**RANSOMWARE**



**DDOS ATTACKS**



**SOCIAL  
ENGINEERING**



**MALWARE**



# WHAT DO YOU PHISHING?

- Definition: Fake emails or messages trick users into revealing data.
- Impact: 30% of breaches involve phishing (Verizon, 2022)
- Prevention: Verify sender details, don't click unknown links.







# WHAT DO YOU SOCIAL ENGINEERING?

- Definition: Fake emails or messages tricking users into revealing data.
- Impact: 30% of breaches involve phishing (Verizon, 2022)
- Prevention: Verify sender details, don't click unknown links.



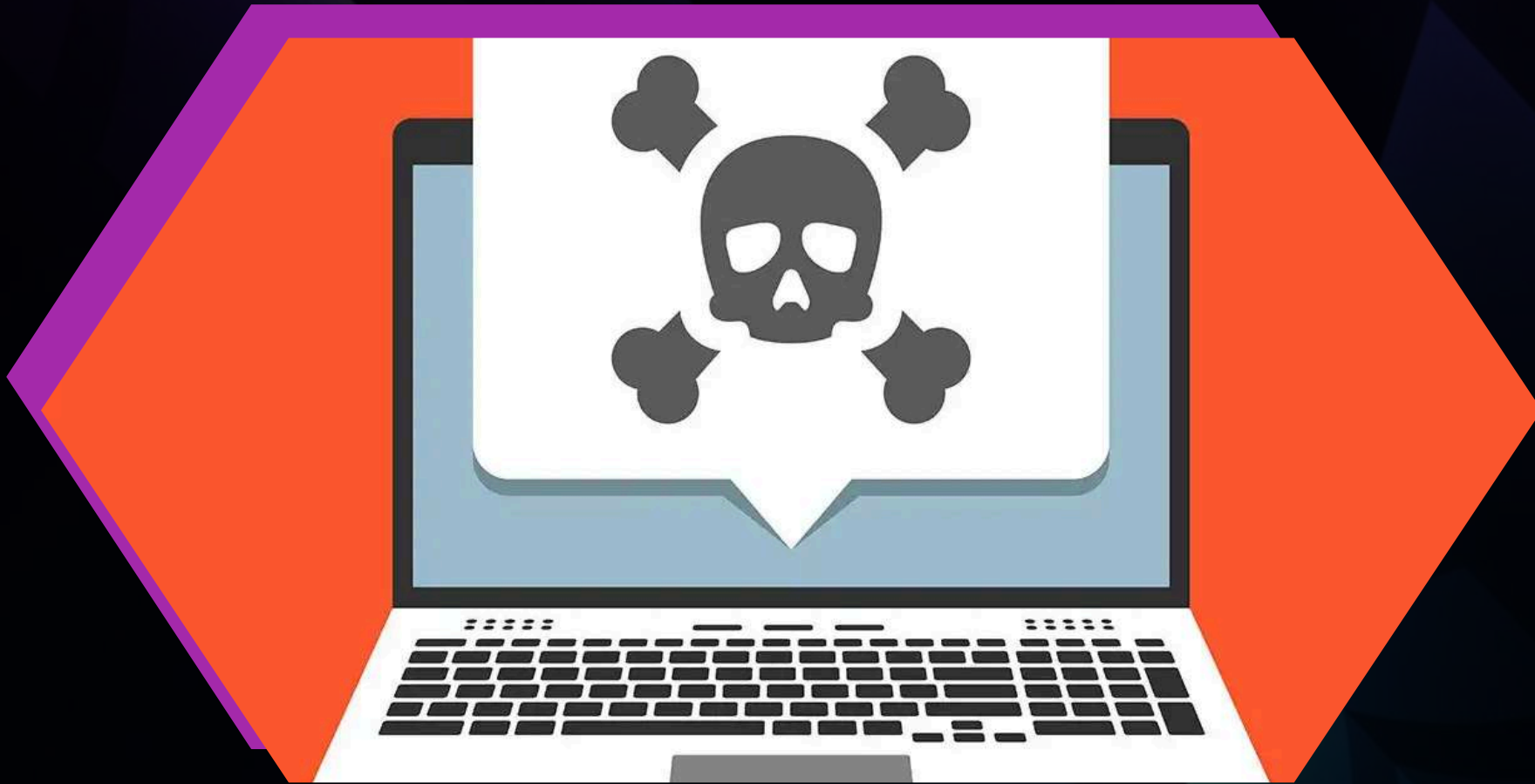


# WHAT DO YOU RANSOMWARE?



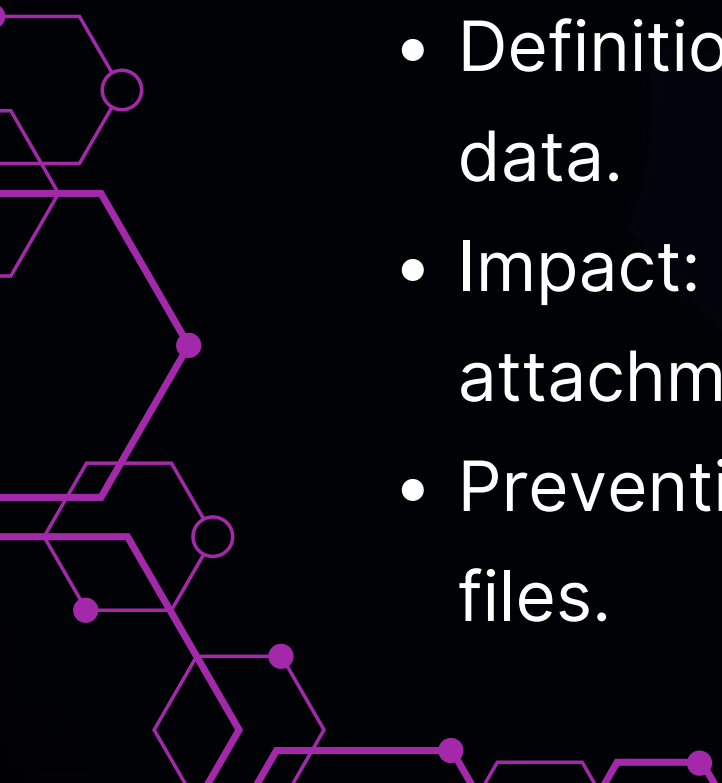
- Definition: Malware encrypts files, demanding ransom for access.
- Impact: \$5.12M average cost per attack (IBM, 2024)
- Prevention: Regular backups, strong security policies.





# WHAT DO YOU MALWARE?

- Definition: Harmful software that steals or damages data.
- Impact: Spreads via downloads, USBs, email attachments.
- Prevention: Install antivirus, don't download unverified files.





# WHAT DO YOU DDOS ATTACKS?

- Definition: Overloading a server to make it unavailable.
- Impact: Disrupts business operations, government services.
- Prevention: Use firewalls & anti-DDoS solutions.







# REAL-WORLD CYBERSECURITY INCIDENTS

- **WANNACRY (2017)**
- **EQUIFAX BREACH (2017)**
- **SOLARWINDS ATTACK (2020)**





RUSHI MOLIYA AU2240020

## REAL-WORLD CYBERSECURITY INCIDENTS

# WANNACRY RANSOMWARE ATTACK (2017)

- **Impact:** Hit 200,000+ computers in 150 countries.
- **Lessons:** Update software, back up data.

WannaCry  
Ransomware



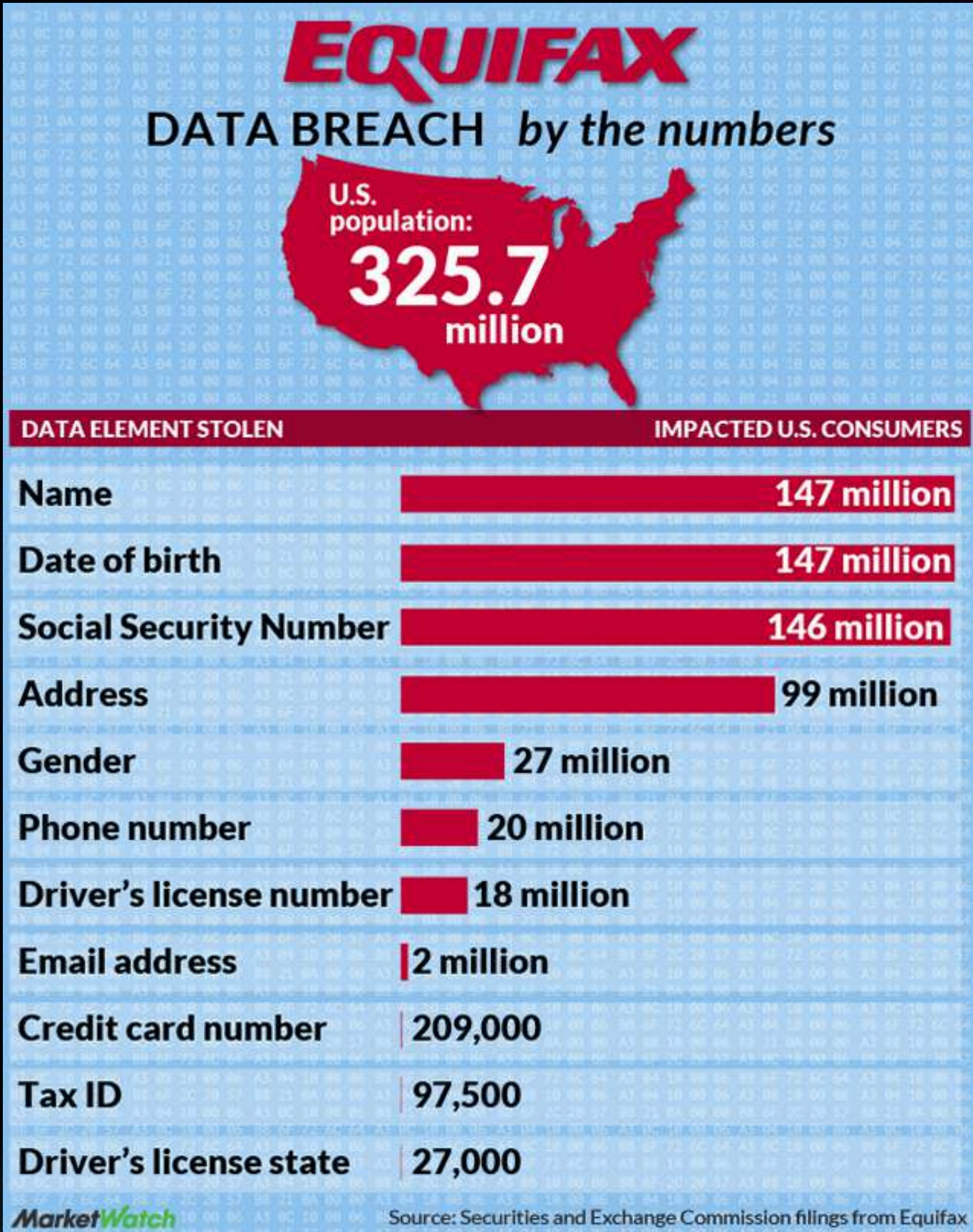




REAL-WORLD CYBERSECURITY INCIDENTS

# EQUIFAX DATA BREACH (2017)

- Impact: 147 million users' sensitive data exposed.
- Lessons: Patch systems, monitor for suspicious activity.

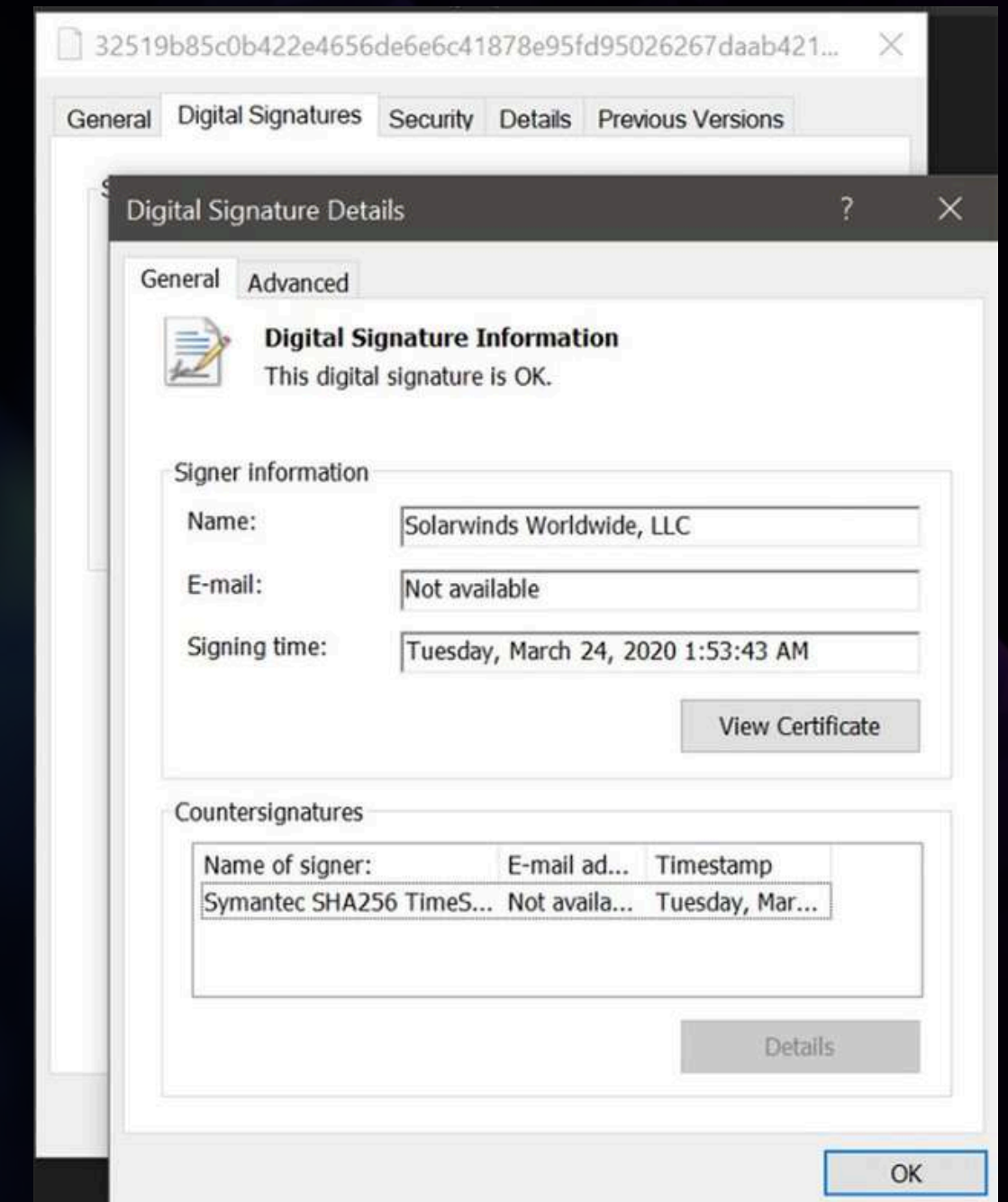




## REAL-WORLD CYBERSECURITY INCIDENTS

# SOLARWINDS SUPPLY CHAIN ATTACK (2020)

- **Impact:** US agencies and global businesses are affected by malware-infected software updates.
- **Lessons:** Secure supply chains, adopt zero-trust policies.





RUSHI MOLIYA AU2240020

# CYBERSECURITY BEST PRACTICES



# CYBERSECURITY BEST PRACTICES

- Strong, Unique Passwords – Use password managers.
- Multi-Factor Authentication (MFA) – Add a second verification step.
- Update Software Regularly – Patch vulnerabilities.
- Beware of Phishing Emails & Links – Verify before clicking.
- Backup Data Securely – Store copies offline & in the cloud.





# FUTURE OF CYBERSECURITY

- **Emerging Threats:**

- AI-powered cyberattacks
- IoT device vulnerabilities
- Quantum computing risks

- **Call to Action:** Stay ahead by learning and adapting!







# CONCLUSION & CALL TO ACTION

- **Key Takeaways:**

- Cyber threats are evolving; awareness is critical.
- Follow best practices to stay protected.
- The cost of cybercrime is rising—prevention is key.

***"Cybersecurity is everyone's responsibility."***

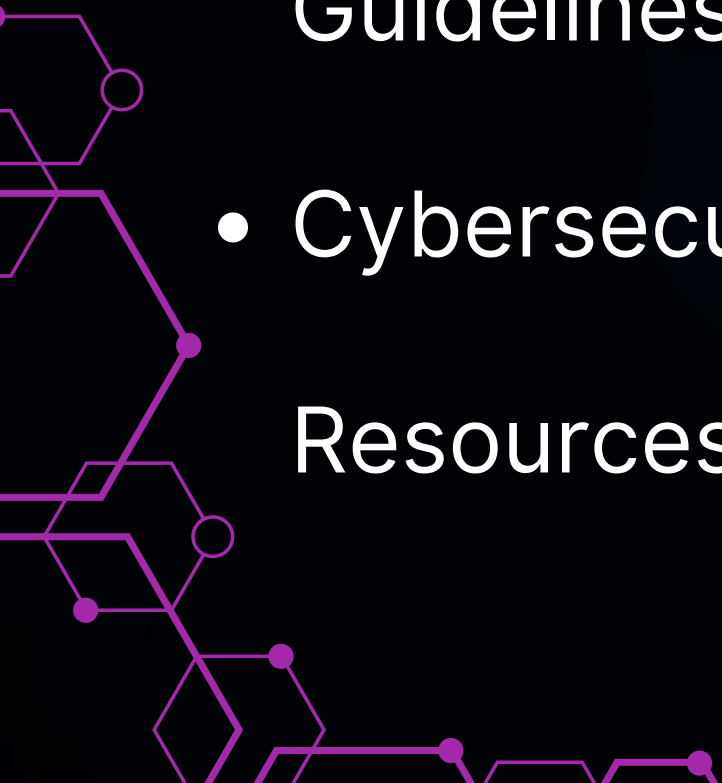


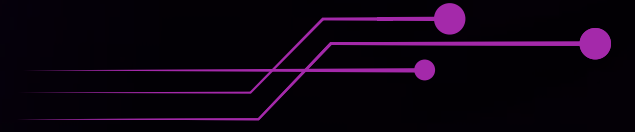




# REFERENCES & FURTHER READING

- IBM Cost of a Data Breach Report 2024
- Verizon 2022 Data Breach Investigations Report
- National Institute of Standards and Technology (NIST)  
Guidelines
- Cybersecurity & Infrastructure Security Agency (CISA)  
Resources ([cisa.gov](https://cisa.gov))





# Q&A SESSIONS





RUSHI MOLIYA AU2240020



# THANK YOU

RUSHI.M@AHDUNI.EDU.IN

