# A PROJECT REPORT ON EVOLUTION OF CYBER SECURITY TIMELINE

WRITTEN BY

BAJEH MUHAMMED SHAIBU

MARCH 2025

OBJECTIVES:

To create an interactive timeline highlighting the evolution of cyber security, emphasizing technological advancements, major threats, and pivotal events.

INTRODUCTION:

The field of cyber security has undergone significant transformation since the early days of computing .This report aims to create a comprehensive timeline that displays the key milestones in the evolution of cyber security, from early security measures to modern AI-driven defenses.

Timeline Breakdown (color key: Threat “red”|Event “blue”|Technology “green”)

1940s—1970s: Foundation of Cyber security

* 1949 –Self-replicating programs theory, John von Neumann theorizes self-replicating automata, laying groundwork for malware.
* 1971—Creeper virus which was first computer virus was discovered by Bob Thomas at BBN Technologies.
* 1971—Antivirus (reaper) on ARPANET.
* 1973—First data privacy law, Sweden enacts the Data Act regulating data collections.

1980s: Emergence of modern threats.

* 1986—Brain virus.
* 1987—commercial Antivirus, McAfee releases virus scan.
* 1988—Morris worm.

1990s: Rise of the Internet and Defense

* 1990—Firewall Commercialized.
* 1996—HIPAA(U.S. healthcare data protection law enacted)
* 1999—Melissa virus.

2000s: Global Threats and Regulation

* 2000—ILOVEYOU Worm,causes 15billion dollars in damages via social engineering.
* 2004—HTTPS Standardization.
* 2007—PCI DSS.

2010s: State-Sponsored Attacks and AI Integration

* 2010—Stuxnet.
* 2015—AI in Threat Detection.
* 2017—Wannacry /Notpetya.
* 2018—GDPR.

2020s:AI-Driven Defense and Quantum Challenges.

* 2020—Zero Trust Architecture.
* 2021—Log4j Vulnerability.
* 2023—Generative AI Tools.

CONCLUSION:

This timelines illustrates cyber security evolution from theoretical concepts to AI- driven ecosystems, highlighting the perpetual arms race between attackers and defenders.