

# **Digital Forensics**

**TRAINING** 

**Unlock the Secrets of Digital Evidence: Discover the Art of Digital Forensics** 



Facilitated by MOHAMED ELGHAZOULY

#### **Online**

Day 1: Monday, June 10, 2024 Day 2: Monday, June 17, 2024



#### **Overview**

In an era marked by a surge in cybersecurity incidents, digital forensics assumes a pivotal role in countering and alleviating the escalating threats. By unraveling the complexities of cyber incidents, digital forensics aids organizations in comprehending vulnerabilities, fortifying security measures, and enhancing incident response capabilities. It not only contributes to the pursuit of justice but also facilitates proactive risk management, empowering organizations to maintain resilience in the face of evolving cybersecurity challenges.

Primarily, this course empowers participants with essential skills to combat the expanding menace of cybercrime. As organizations and individuals confront heightened risks to their sensitive information, proficiency in digital forensics becomes paramount for investigating and combating these crimes. Furthermore, the course addresses legal and investigative requirements by furnishing participants with the knowledge and techniques to adeptly identify, collect, preserve, and analyze digital evidence. This ensures that investigations align with legal and regulatory standards, ensuring the admissibility of digital evidence in legal proceedings.

Through a blend of expert-led presentations, group discussions, practical exercises, and case studies, participants undergo a hands-on learning experience in applying digital forensics concepts and principles. This interactive approach guarantees that participants exit the course equipped with the tools to pinpoint vulnerabilities, implement preventive measures, and respond effectively to security incidents. The course endows them with the skills and knowledge necessary to navigate the intricate realm of digital forensics, safeguard valuable data, and fortify organizations in the contemporary digital age.

## Why Attend

- Gain essential skills in digital forensics, enabling you to investigate and analyze digital evidence effectively.
- Stay updated with the latest techniques and best practices in digital forensics to stay ahead in the evolving field of cybersecurity.
- Improve investigation outcomes by learning to navigate digital environments, recover data, and accurately present findings.
- **Enhance** your career prospects with in-demand skills sought after by organizations needing digital forensics expertise.

### **Learning Objectives**

This course will give participants a strong foundation in digital forensics principles, practices, and tools, enabling them to gain a solid foundation in the art of digital forensics. Upon completion, participants will be able to:

- Understand the fundamental concepts and principles of digital forensics.
- Apply industry best practices for identifying, collecting, and preserving digital evidence
- Utilize specialized tools and techniques to analyze digital data and recover deleted or hidden information.
- Conduct investigations involving various digital devices, including computers, mobile phones, and networks.
  - Present findings and evidence in a clear, concise manner.

### **Who Attends**

This course is ideal for professionals interested in cyber security, information technology, risk management, compliance, or digital forensic investigations. It is recommended for individuals with some knowledge of IT concepts and operating systems, including:

- **IT Security -** Strengthen incident response and data protection through digital forensics knowledge
- **Incident Response -** Effective handling, analysis, and containment of cybersecurity incidents
- **Digital Forensic Analyst -** Identify, collect, preserve, and analyze data from various digital devices, such as computers, mobile phones, and networks
- **Network administrators -** Identify threats, investigate incidents, and implement network protective controls
- **Security Managers -** Informed decision-making, incident management, and compliance through digital forensics

### **Meet Your Facilitator**



#### MOHAMED ELGHAZOULY

**Mohamed** is a cyber security Expert, Professor, trainer, executive coach and Security Architect, with extensive forensics and privacy expertise in different industries. He has advised and trained in a wide range of industries from energy, healthcare, banking and finance, education and training, telecom and government.

His most recent roles were as graduate and undergraduate professor for different technical offensive security and forensics.

He established a boutique advisory firm "Galvorn Dome Inc." who is along with the right professionals to be the trusted advisors for clients worldwide.

#### Qualifications and Certifications:

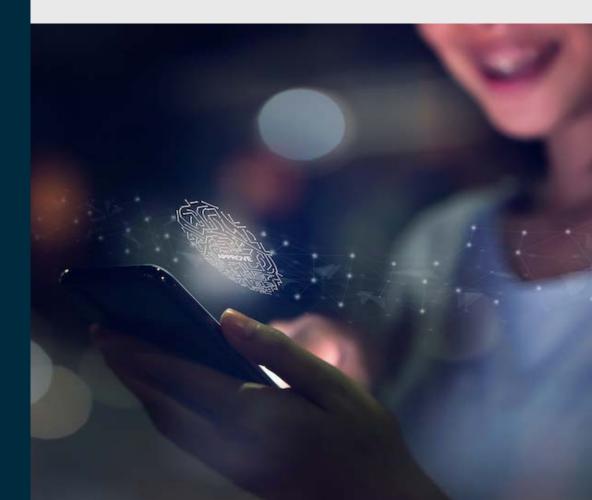
- M.Sc. and B.Sc. Electronics and Communication Engineering
- Certified Information Systems Security Professional (CISSP)
- Certified Information Systems Auditor (CISA)
- Certified Data Privacy Solutions Engineer (CDPSE)
- GIAC Systems and Network Auditor (GSNA)
- Certified Third Party Risk Professional (CTPRP)
- ITIL Foundations Exam Certified (ITIL Foundation Certified)
- OneTrust Professional and Expert
- Cisco Certified Network Associate (CCNA)
- Microsoft Certified System Engineer (MCSE)
- Expired-PCI SSC Payment Card Industry Professional (PCIP)
- Revenue Assurance Practitioner's Accreditation, TM Forum
- Oracle8i Certified Database Administration Master

### **Preparation**

This workshop is highly interactive with group activities and discussions throughout. Come prepared with some current challenges you face in your organization.

#### To participate you'll need:

- · A computer with camera and microphone
- Strong internet connection
- Quiet, well-lit space
- Current product or service challenges you facing



# **Explore** the Agenda

DAY 1 | Monday, June 10, 2024

11:00am EST	<ul> <li>Introduction to Digital Forensics</li> <li>Understanding the digital forensic process</li> <li>Legal and ethical considerations in digital investigations</li> <li>Role of digital forensics in law enforcement and corporate</li> </ul>	11:00am EST	<ul> <li>Digital Forensic Analysis Techniques</li> <li>File system analysis and keyword searching</li> <li>Timeline analysis and reconstruction</li> <li>Data carving and recovery of fragmented files</li> </ul>
12:45pm EST	<ul> <li>Digital Evidence Identification and Collection</li> <li>Understanding the digital forensic process</li> <li>Legal and ethical considerations in digital investigations</li> <li>Role of digital forensics in law enforcement and corporate</li> </ul>	12:45pm EST	<ul> <li>Mobile and Network Forensics</li> <li>Investigating mobile devices and applications</li> <li>Network traffic analysis and log examination</li> <li>Internet and social media investigations</li> </ul>
	environments	2:00pm EST	Break
2:00pm EST	Break	3:00pm EST	Malware Analysis and Incident Response
3:00pm EST	<ul> <li>File Systems and Data Storage Analysis</li> <li>Understanding file systems and their structure</li> <li>Recovering deleted or hidden data</li> </ul>		<ul> <li>Analyzing malicious software and malware behavior</li> <li>Incident response procedures and tools</li> <li>Live forensics and volatile data collection</li> </ul>
	Analyzing data storage media	4:45pm EST	Reporting and Presentation of Findings
4:45pm EST	<ul> <li>Forensic Imaging and Data Acquisition</li> <li>Principles of forensic imaging</li> <li>Creating and verifying forensic images</li> </ul>		<ul> <li>Writing forensic reports and documenting findings</li> <li>Presenting evidence in court or other legal proceedings</li> <li>Quality Control and peer review in digital forensics</li> </ul>
6:00pm EST	Tools and techniques for data acquisition  End of Day 1	6:00pm EST	End of Day 2

DAY 2 | Monday, June 17, 2024