Cloud and Mobile Forensics

Module Information

2022.01, Approved

Summary Information

Module Code	6204COMP
Formal Module Title	Cloud and Mobile Forensics
Owning School	Computer Science and Mathematics
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 6
Grading Schema	40

Teaching Responsibility

LJMU Schools involved in Delivery
Computer Science and Mathematics

Learning Methods

Learning Method Type	Hours
Lecture	22
Practical	22

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
SEP-CTY	CTY	September	12 Weeks

Aims and Outcomes

Aims	To develop an advanced knowledge of mobile device forensics.To gain experience of conducting forensic investigations on a range of mobile devices.To understand the organisation and operation of Cloud Computing systems.To critically assess the opportunities and challenges of cloud forensics.

After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Critically evaluate the forensic investigation of mobile devices
MLO2	2	Apply advanced knowledge of mobile device forensics
MLO3	3	Critically evaluate forensic implications of an investigation involving cloud computing
MLO4	4	Develop a plan for performing complex cloud computing forensics

Module Content

Outline Syllabus	Mobile Device Forensics: introduction to mobile network, SIM cards and mobile devices. SIM card forensics and 'Feature' handset forensics. Location data and common challenges. Smartphone forensics. Android, iOS and introduction to Internet of Things (IoT) forensics.Cloud Computing Forensics: Introduction to cloud Computing, cloud deployment and service models. Cloud computing services and data storage. Cloud security and attack patterns. Cloud forensics and challenges.
Module Overview	With the rise of smartphones and the explosion of apps running on them that are supported by extensive back-end services, two of the most significant new areas of computing are mobile devices and cloud computing. With this massive rise in usage, new areas of digital forensics are now emerging to cater for the investigation of those user devices and the backend infrastructure respectively. This module enables you to examine how forensic investigations can be conducted in this area and identify the key similarities and differences involved.
Additional Information	With the rise of smartphones and the explosion of apps running on them that are supported by extensive back-end services, two of the most significant new areas of computing are mobile devices and cloud computing. With this massive rise in usage, new areas of digital forensics are now emerging to cater for the investigation of those user devices and the backend infrastructure respectively. This module will examine how forensic investigations can be conducted in this area and identify the key similarities and differences involved.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Technology	Mobile Phone Investigation	50	0	MLO1, MLO2
Centralised Exam	Examination	50	2	MLO3, MLO4

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Alex Akinbi	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings