Name: Worms, Byron **Date:** 30.06.2015
Student course topic: PH-Images
Current lecture topic: Digital Forensics and Digitized Forensics

Which security aspect(s) is/are addressed by the method(s) / concept(s) described ...

... in the **current lecture topic**?

- ☐ Confidentiality
- ☒ Authenticity
- ☒ Integrity
- ☐ Non-repudiation
- ☐ Availability
- ☐ Privacy
- ☐ None

... in your chosen **student course topic**?

- ☐ Confidentiality
- ☒ Authenticity
- ☒ Integrity
- ☐ Non-repudiation
- ☐ Availability
- ☐ Privacy
- ☐ None

a) For the **current lecture topic**, which current application scenarios have you seen in the news or literature?
Important: Inlude a reference (e.g. website) for your news item!

Dutch develop computer forensics app for [illegible] investigators. Linux basiertes Forensic OS, welches auf dem [illegible] per CD, USB gestartet wird. Sucht nach dem Start Verbindung zur [illegible] für Remote-Access. Ref: www.nltimes.nl

b) Do you think your chosen **student course topic** could be combined with the **current lecture topic** to increase the security or usability of media objects?

☒ yes ☐ no

c) If you answered in b) above with **yes**:

How could the combination of both topics be implemented?

Forensische Analysen von Bildern oftmals mittels kryptographische Hashes. → Anfällig gegen jegliche Modifikationen → Robuste Hashes ein Mix aus Krypto-Hashes und Bilderkennung

What could be the benefit of this combination?

Zuverlässigere Zuordnung von zum Beispiel als illegal markiertes Bildmaterial, selbst bei Änderungen wie Skalierung etc...

What would be the cost/downside of this combination?

Die benötigte Zeit kann den vorgegebenen Rahmen sprengen, wenn ein aufwendiges PH-Verfahren gewählt werde

Which application scenario do you see where this combination could/should be applied?

Automatisiertes Aufspüren von illegalem Bildmaterial im Netz und Computern (z.B. Kinderpornographie ...)

d) If you answered in b) above with **no**:

Which reasons do you see that prevent a combination of both topics?

Quelle: Robust Hashing for Efficient Forensic Analysis of Image Sets (Martin Steinebach)