Media Forensics and the Challenge of Big Data

Dagstuhl Seminar 23021 Jan 08 – Jan 13, 2023

Proposed Agenda

Outline

- 5 days of discussion
- Each day with a different focus
- Two sessions per day (Monday-Thursday times:)
 - Session 1: from 1pm-3pm Germany time (GMT+1)
 - O 1h break
 - **Session 2**: from 4pm-6pm Germany time (GMT+1)
 - Also
 - O breakfast 7:30-8:45am
 - O coffee & tea 10-11am
 - O lunch 12:15 -1pm
 - O coffee & cake 3-4pm
 - O dinner 6pm

Day 1 - Traditional methods in Forensics

- Opening by Prof. Anderson Rocha (30min)
- Group (very) short introductions (1h)
- Traditional methods in Forensics (30min) by Mauro Barni
- Break (1h)
- Panel session (2h)
 - Participants' experiences, expectations and long-term view on such methods,
 - limits and advantages of such methods

Day 2 - Deep learning based methods

- Deep learning based methods
- Short view on DL-based methods (30min) by Christian Riess
- Panel session (1h30min)
 - Participants' experiences, expectations and long-term view on such methods
 - Limits and advantages of such methods
- Break (1h)
- Panel session (2h)
 - Cross-media approaches, other methodological issues,
 - Requirements for non-academic applications
 - o Scaling

Day 3 - Big data & Benchmark and performance evaluation

- Morning hike
- Panel session: Big data challenges (2h)
 - Participants' experiences, expectations and long-term view on such methods
 - O limits and advantages of such methods
- Break (1h)
- Panel session: benchmark and performance evaluation (2h)
 - Benchmark and performance
 - Context incorporation, social and economical bias
 - Other methodological issues

Day 4 - Applications

• Panel session: Current and future applications (2h)

- O Marco Fontani (10min)
- O Isao Echizen (10min)
- O Marco Fontani (10min)
- O Lakshmanan Nataraj (10min)
- Break (1h)
- Panel session: Challenges ahead (2h)
 - o Jane Wang (10min)
 - O Sébastién Marcel (10min)
 - O Anderson Rocha (10min)
 - o Irene Amerini (10min)

Day 5 - Questions and future

- 8:45 Panel session: Forensics questions
- 10:00 Break
- 11:00 Panel session: Wrapping up report
- 12:15 lunch and departure