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)
  ○ 1h break
  ○ Session 2: from 4pm-6pm Germany time (GMT+1)

★ Also
  ○ breakfast 7:30-8:45am
  ○ coffee & tea 10-11am
  ○ lunch 12:15 -1pm
  ○ coffee & cake 3-4pm
  ○ 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
  - 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
  - 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)**
  - Marco Fontani (10min)
  - Isao Echizen (10min)
  - Marco Fontani (10min)
  - Lakshmanan Nataraj (10min)
- **Break (1h)**
- **Panel session: Challenges ahead (2h)**
  - Jane Wang (10min)
  - Sébastién Marcel (10min)
  - Anderson Rocha (10min)
  - 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