



MeMAD

Methods for Managing
Audiovisual Data



ReTV

Re-Inventing TV fo
the Interactive Ag

AI4TV 2019 workshop

<https://memad.eu/ai4tv2019/> - #ai4tv

21/10/2019

Organizers



Raphael Troncy
Assistant Professor,
EURECOM



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Aalto University



Hamed R. Tavakoli
Nokia Technologies



Lyndon Nixon
MODUL Technology



Vasileios Mezaris
CERTH-ITI

Workshop Topics: *AI Technologies for TV Content*

- Multimodal content analysis: scene segmentation, people and concept recognition, topic identification using video, audio and/or (textual) metadata, deep captioning
- Embeddings for Multimedia Knowledge Graph
- Automatic multimedia summarization and remixing
- Interactive multimodal search and browsing in archives
- Hyperlinking and enrichment of TV content
- Breaking the language barrier of TV content using multimodal translation
- Gender studies on TV and Radio programmes
- Predictive analytics using TV programme metadata

Workshop program

- 09:30-09:40: *Welcome by the chairs*
- 09:40-10:30: **Keynote Talk**
*Annotation automation to support dynamic exploration
and creative retrieval of audiovisual archives -
Johan Oomen (NISV, The Netherlands).*
- 10:30-11:00: Coffee break



Workshop program

- 11:00-11:20: *L-STAP: Learned Spatio-Temporal Adaptive Pooling for Video Captioning* - Danny Francis and Benoit Huet (EURECOM, France)
- 11:20-11:40: *A Stepwise, Label-based Approach for Improving the Adversarial Training in Unsupervised Video Summarization* - Evlampios Apostolidis, Alexandros Metsai, Eleni Adamantidou, Vasileios Mezaris (CERTH, Greece) and Ioannis Patras (QMUL, UK)
- 11:40-12:00: *On the Robustness of Deep Learning Based Face Recognition* - Werner Bailer and Martin Winter (JOANNEUM RESEARCH, Austria)
- 12:00-12:20: *Gender Representation in French Broadcast Corpora and Its Impact on ASR Performance* by Mahault Garnerin, Solange Rossato and Laurent Besacier (Univ. Grenoble Alpes, France)

Workshop program

- 14:00-14:50: **Keynote Talk**
AI gets creative - Dr. Marta Mrak (BBC, UK)
- 14:50-15:10: *AI for Audience Prediction and Profiling to Power Innovative TV Content Recommendation Services* - Lyndon Nixon (MODUL Technology, Austria), Krzysztof Ciesielski and Basil Philipp (Genistat AG, Switzerland)
- 15:10-15:30 *Data-driven Summarization and Synchronized Second-screen Enrichment of Cycling Races* - Steven Verstockt, Erik Mannens and Jelle De Bock (Ghent University, Belgium)
- 15:30-16:00 Coffee break



Workshop program

- 16:00-16:10: *Demo pitches*, 2 minutes each, by all demo session presenters
- 16:10-17:00: Poster Session
 - 16:10-17:00 *Examples of Uses of Artificial Intelligence in Video Archives* - Antoine Mercier, Sébastien Ducret, Charlotte Bürki and Léonard Bouchet (Radio Télévision Suisse, CH)
 - 16:10-17:00 *Automatically Adapting and Publishing TV Content for Increased Effectiveness and Efficiency* - Basil Philipp, Krzysztof Ciesielski (Genistat AG, Switzerland) and Lyndon Nixon (MODUL Technology, Austria)
 - ~~○ 16:10-17:00 *Personalized Movie Trailer Using Thumbnail Containers* - Ghulam Mujtaba and Eun-Seok Ryu (Gachon University, Korea)~~
 - 16:10-17:00 *A Workstation for Real-time Processing of Multi-channel TV* - Mathieu Delalandre (LIFAT Laboratory, France)
- 17:00-17:30 *Wrap up, Next steps and Closing* by all workshop participants



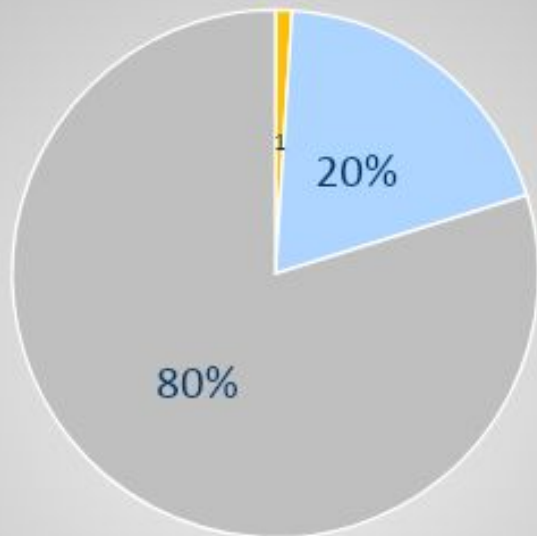
AI4TV: Examples of Uses of Artificial Intelligence in RTS Video Archives

Sébastien Ducret, Charlotte Bürki

21.10.2019

Perspective : Open up the archives

The RTS
Contents
situation



- QC on medias issued from the digitalisation
- Well described Contents
- Little or not documented contents

Dozens of man-years to fill the gap !

So, can the AI help us to facilitate the exploitation of the AV contents?

Done

Facial
recognition

Classification

Gender
identification

Visual search

https://amq.media.int

← → ↻ https://amq.media.int

RTS .ai

Bouchet, Léonard (RTS) ⏻

- Quality check >
- Suivi de workflow >
- Création segments >
- Reconnaissance faciale >
- Reconnaissance locuteur >
- Monitoring >
- Genre >
- Recherche visuelle >
- Condition d'utilisation

Bienvenue Bouchet, Léonard (RTS)

Veillez utiliser la navigation de gauche pour accéder aux fonctionnalités de l'application

Content Recommendation Demos



Content sWitch

- Replacing „general audience“ trailers in media streams with **recommended** trailers according to the audience segmentation

4U2

- Publishing content summaries on trending topics via messaging/chatbots **scheduled** at an optimal time



A Workstation for Real-Time
Processing of Multi-Channel TV

Mathieu Delalandre (mathieu.delalandre@univ-tours.fr)

