

PROGRAMME

TUESDAY 21 MARCH 2023 (08:45-18:00 CET)

OPENING

08:45 – 09:00 **Opening**

SESSION 1: DATA-DRIVEN SUCCESS (09:00 – 10:30)



Moderated by **Kim Viljanen** works as a metadata expert at the Finnish Broadcasting Company Yle. His primary goal is to improve the findability, visibility and engagement of Yle's online television and radio service Yle Areena. He is on a constant journey to improve the company wide metadata practices using state of the art technologies such as artificial intelligence.

09:00 – 09:25 **The role of the CDO – best practices for a data-driven PSM organization**

- Data connect everything in a PSM
- Why there is a need for a CDO
- What is the position alike - in theory
- Some insights into the practice - successes and challenges



Dr. Christian Vogg started his professional career as a print journalist, then worked for radio, TV and online for 20 years at public broadcaster Westdeutscher Rundfunk (WDR) in Cologne. As senior advisor to the CEO at WDR he was involved in the digital strategy. Later he and his team developed the WDR Mediathek (AV-Online-Portal). After overseeing metadata management at WDR he joined the European Broadcasting Union EBU and served as Head of Radio and Music, managing the world's biggest music exchange as well as being active in radio and cross media strategies including DAB+ throughout Europe. In 2016 he joined Swiss Radio and TV (SRF) in Zürich and was next to the archiving and research business as data manager responsible for the improvement of metadata driven workflows in the company. He also introduced artificial intelligence supported workflows at SRF. In his current position as Chief Data Officer of SRG, he coordinates on a national level all data related topics to develop SRG as a data driven company.

09:25 – 09:50 **Streaming wars and technology trends**

This presentation will cover all aspects of the state of the so-called streaming wars, the streaming market, recent innovations and challenges. Technology trends covered includes cloud production, using data to personalize the experience, standardized data collection and aggregation and technologies to reduce carbon footprint.



Magnus Svensson (Eyevinn Technology) A Media Solution Specialist with long experience in small and large-scale technology solutions in the TV and Media area, as a leader and technical advisor in OTT and streaming media delivery. Magnus works for Eyevinn Technology, an independent consultant company specializing in video streaming, distribution and technology. Eyevinn are helping large broadcasters, TV operators, newspapers and technology vendors to solve challenges within video streaming. Magnus assignments includes streaming solution architecture, technical product management, business development and senior management advisory. Magnus is also involved in strategical assignments helping customers to navigate in the media industry, as well as conducting Technical Due Diligence projects. Prior to Eyevinn Technology, Magnus has a long background at Ericsson building large scale media solutions.

09:50 – 10:15 **Commercializing data safely and successfully**

Why more companies are using their data as a new source of growth and revenue



Hamza Khan is a leader in data commercialization, helping companies across industries unlock the value of their data assets. At Nasdaq Data Link, he is responsible for European partnerships with firms ranging from large financial institutions to media, shipping and startups. Prior to Nasdaq he was the CEO of Suburbia, an alternative data firm based in Amsterdam.

10:15 – 10:30 **Roundtable**

SESSION 2: SEMANTIC CONTENT CATALOGUES (11:00 – 12:30)



Moderated by **Tatjana Mladenovic**. Product manager at the BBC Archives Technology & Service Data team, working on content metadata. She has been working on metadata for media in engineering, data analytics and management roles for almost 20 years. Tatjana's main interests are automation of metadata processes and data quality.

11:00 – 11:25 **Rethinking genre vocabulary to improve the quality and descriptiveness of tagging metadata**

The program catalog of Yle Areena (the OTT service of Finnish Broadcasting Company Yle) contains currently over ten thousand TV and radio series and around 4 million program objects (episodes, singles, clips). The content catalogue is broad of themes related to all aspects of life - we have for example news, sport, childrens content, fiction, movies, etc. Our aim is to provide a good public service to all people in Finland. To make such a broad content catalogue accessible both for applications and humans, we use a system of semantic tagging to describe different aspects of each content item. The Genre Vocabulary is probably the most essential in giving the base structure for the catalogue.

This presentation will focus on our recent efforts to develop an improved functionality of our genre vocabulary. We discuss how we can bring semantic coherence, structure, and ease of use to our content semantic tagging.

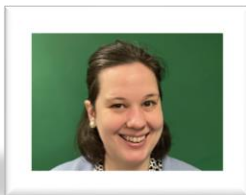


Saara Pietikäinen is a metadata specialist in Yle Areena. She has been working with metadata tagging related to all Yle's media content. Her current focus is on developing better streaming service experience for Areena users by improving metadata quality.

Kim Viljanen (Yle)

11:25 – 11:50 **Interior design knowledge in IKEA's product catalogue**

Capturing interior designer knowledge allows us to give better product recommendations to IKEA's customers



Katariina Kari (IKEA) is the lead ontologist at Inter IKEA Systems B.V. Katariina holds both a Master of Science and a Master of Music and is specialized in the semantic web. At IKEA, she models the IKEA Knowledge Graph; a common vocabulary to offer customers compelling interior design solutions in the digital space. In her free time, Katariina advises institutions, such as chamber music festivals and mental health coaches, in digitalisation, guiding the humanities to the digital age.

11:50 – 12:15 **Understanding our content better through graph-like connections**

The power and potential of content-to-content and tag-to-tag relationships



Tom Hodgkinson (BBC) Content metadata specialist, focusing on ontologies, taxonomies and graph databases

12:15 – 12:30 **Roundtable**

SESSION 3: DATA STRATEGY (14:00 – 15:30)



Moderated by **Alberto Messina** (RAI) Research and Development coordinator, Head of Rai's R&I unit in TV Production co-author of 80+ scientific publications, leads research on content production and management systems based on AI technologies, and full-IP and cloud-based systems for production. He collaborates with national and international research institutes, and has worked in many European funded projects. Past contract professor at the Polytechnic of Turin, he actively participates in international standardization bodies, EBU and MPEG.

14:00 – 14:25 A 3rd-party Electronic Programme Guide platform for linear and on-demand

Randi Volle (NRK)

14:25 – 14:50 Gaia-X



Francesco Bonfiglio joined GAIA-X in March 2021 as the new CEO. With more than 30 years' experience in the business of consulting and information technology, Francesco brings into Gaia-X his knowledge of the cloud and data market needs, and his vision on how the Association should revolutionise the Digital Economy. As an Independent Advisor since 2020, his executive career was built from the ground up in many Italian and Multinational contexts. A former Chief Executive Officer for ENGINEERING D.HUB (Hybrid Cloud and Digital Transformation company within the largest Italian System Integrator Group), a Vice President for Technology Services at AVANADE and a Managing Director within the ACCENTURE Group, Chief Technology Officer for HEWLETT-PACKARD EMEA, SW Factory Director at UNISYS, Technical Director, and Methodology Evangelist at RATIONAL SOFTWARE amongst his positions. With a background in Electronics Engineering, he started his career in the late 80s as a HW/SW Engineer working on some of the most advanced R&D projects, from the Sonar System for the Italian Navy (ANSQQ14IT) prized during the Gulf war for the mine-hunting performances, to the Eurofighter Fighter Aircraft (EFA), still one of the most advanced examples of

technology in the Military field. Francesco has held a bottom-up career, covering all roles within the IT, from developer to top-executive, from R&D to business units' leader. An early supporter of the need for continuous innovation, he is a big fan of the startup ecosystem, active member of evaluation commissions, and a board member and co-founder of FOOLFARM.com, the first example of Startup Studio in Italy. Amongst other roles, Francesco has represented the IT world and then became Vice President of Confindustria (Italian Trade Association) for Valle D'Aosta. Living in Italy, in the countryside out of Milan, he is happily married and a father of three sons, he loves music and has played in several independent live and record productions since the 80s. Francesco believes in the power of collective intelligence, lateral thinking, and teamwork, as a propeller for transformation, in the business as well as in the whole life!

14:50 – 15:15 Data documentation tools for more effective analysis

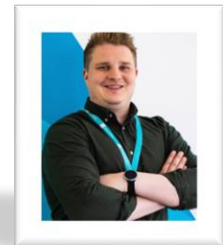
In Yle, we have a long history of data utilization within analytics and automation. While new analysts and data scientists come and go, it's important to ensure that our data is easy to find and understand.

In the presentation, we will present Yle's data documentation tools and processes: how we ensure that the usability of our data remains high.



Olli Salakari (Yle) I'm a SW/Data architect at Yle, Finland's national public service media company. My focus area is data: designing data entities, coordinating data pipeline development, and providing data services and tooling for users. I have ~10 years of experience with several different data-related technologies and BSc in Mathematics.

Samuli Pöntinen, Head of Data at Yle. Samuli is a data professional with a background of building data platforms and data management practices for different organizations. For the past two years Samuli has been in charge of data strategy work and the data development of Yle, the Finnish Broadcasting Company.



15:15 – 15:30 Roundtable

SESSION 4 : GETTING MORE FROM CONTENT (16:00 – 18:00)



Moderated by **Alexandre Rouxel** is Senior Project Manager on Data and AI at the EBU where he manages the AI and metadata community, AIM, and coordinates the collaborative working groups on Metadata, AI and Cloud Computing. Within the EBU Technology and Innovation Department, he leads the development of AI applications for fake news detection and the metadata exchange platform for archives. He has 20 years of experience in developing innovative products from research to market.

16:00 – 16:30

Roundtable: Generative AI. How will it impact our field? Will, or should, organizations think differently about data?

16:30 – 17:00

Content chapterization for audio news bulletins



Ivan Thomas - Lead for R&D and Open Data at the Digital Department of Radio France. I have a technical background and I love podcasts. Our main focus in the R&D team is on trying to increase the knowledge about the audio contents of Radio France using automatic metadata extraction.

Allaoua Benchikh - Software engineer at Radio France, working on various subjects like Open API development, Speech to text automation and Natural language processing



17:00 – 17:30

Database of known fakes – a searchable graph of enriched debunks

The Database of Known Fakes facilitates the verification workflow through collecting semantically enriched debunking content.

Eneya Georgieva (Ontotext) is the owner of Disinformation related products at Ontotext, the leading provider of graph-based metadata, search, and analytic solutions. As an editor of a business magazine and financial journalist, Georgieva has a deep insight into the scope of disinformation campaigns. Driven by her commitment to tackling this global issue, Eneya Georgieva and her team leverage the diversity of tools and techniques available to us, including NLP techniques, to create greater awareness and understanding of the topic. @EneyaGeorgieva

17.30 – 18:00

French presidential election of 2022 – Zemmour, a statistical anomaly

In France, the speaking time of election candidates in the audiovisual media is regulated by law and monitored by the regulator (Arcom). In the context of the recent presidential election, we propose to analyze "what is said rather than who speaks". To do so, we use Speech-to-Text and statistical modelling on a broad corpus of news broadcasted on French TV and radio. This approach is a way to characterize a type of audiovisual media bias.



Nicolas Hervé is the Head of the Research Department at Ina (French National Audiovisual Institute). His current research activities focus primarily on the digital social sciences and humanities and, more specifically, on the information ecosystem using machine learning and data mining approaches. He coordinates the OTMedia research platform that enables transdisciplinary studies on the media world and the propagation of online information.

WEDNESDAY 22 MARCH 2023 (09:00-18:00 CET)

SESSION 5: DATA GOVERNANCE (09:00 – 10:30)

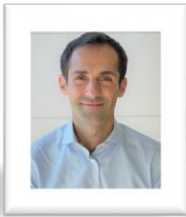
Moderated by **Alexandre Rouxel** (EBU)

09:00 – 09:20 **Applying a responsible data strategy and governance in PSM**

Ruth Kuehn (DW)

09:20 – 09:40 **Data law – an overview of the European Union's (hyper)activity**

A presentation of recent EU legislative initiatives affecting the use of data



François Lavoir (EBU) is a public affairs expert who works with the EBU team in Brussels representing Public Service Media before the European institutions. He is specialised in EU legislation focusing on the use of data, from data protection to artificial intelligence.

09:40 – 10:00 **The truth about data standards**



Rowan de Pomerai leads the technology strategy and delivery for the DPP, the media industry's international community. The DPP provides the insight and connections our members need to do business better. Rowan has a strong background in media innovation. He has an MEng in Media Engineering, and has spent 15 years in the industry, working across broadcasters, production, and software companies.

10:00 – 10:20 **From silos to 'team of teams'**

Maximizing the value of metadata, analytics, algorithmic recommendations and AI through building effective and matrixial teams



Samuel Profumo (RTBF) is a media and technology expert with over 20 years of industry experience. He was previously the Director of Operations, Revenue, and Data Management at Groupe Figaro in France, providing him with an in-depth understanding of the challenges faced by traditional media companies in the ever-changing digital landscape. Currently, he is the Chief Data Officer at RTBF, responsible for overseeing the creation of innovative algorithms for content recommendation and metadata generation, as well as the development of a centralized platform for user data management. Additionally, as the French Tech President in Brussels, Samuel aims to foster innovation and support the development of technology startups in Belgium, France and Europe.

10:20 – 10:30 **Roundtable**

SESSION 6: ONTOLOGY AND STANDARDS (11:00 – 12:30)

Moderated by **Kim Viljanen** (Yle)

11:00 – 11:30 **EBUCorePlus – the advanced ontology for media**

Truly semantic. AI ready. Covering the complete media value chain. EBUCorePlus has arrived!



Jürgen Grupp (SWR) is chairing EBU's metadata modelling group and a contributor to EBUCorePlus. At SWR, he is focussing on information architecture and trying to push the organisation towards data literacy.

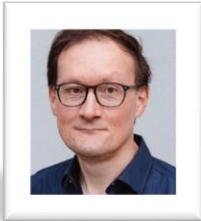
DATA TECHNOLOGY SEMINAR

AN EBU EVENT

11:30 – 12:00 IPTC Sport Schema – the next generation of sports data

A generic ontology for sports schedules, teams, results, statistics and actions based on IPTC's SportsML.

Brendan Quinn is the Managing Director of the International Press Telecommunications Council, IPTC. As MD of IPTC, his work is as diverse as marketing and recruiting new members, coordinating IPTC's member events, advising members on their technology projects, collaborating with other organisations on media technology standards, contributing to the design of IPTC's standards and writing code to support IPTC's work. Brendan has over two decades of experience in managing technology for media companies such as Fairfax Media in Australia, Associated Press and the BBC.



12:00 – 12:30 Metadata facets in production and distribution



Jared Thomas joined the BBC as a trainee "Radio Engineer" in 1988, and was originally fixing analogue sound desks and tape machines. Jared became a project engineer in the mid 90's and was involved in the move of Radio 1 to Yalding house. In 1998, Jared became a member of the BBC's DAB implementation team and as part of that, set up a Dalet system to host the "Network Y" pilot radio station – which then became BBC 6Music. The DAB team became part of "Radio Online", and The Dalet system was what 6Music went live on in 2002 and they then migrated to the pan-BBC dira system in 2003. In 2005 Jared changed roles to the Radio "information Infrastructure coordinator" – which involved trying to join all the disparate information systems in the various BBC Radio Workflows. That role then became a "Lead Technologist" role, but stayed being involved in integration of data systems – mostly in the BBC radio "domain". In 2010, the BBC awarded a single supplier frame work for the pan-BBC Audio Edit & Payout (AE&P) solution to the VCS 'dira' product. Over time, VCS became SCISYS and SCISYS is now CGI. In 2014 Jared successfully applied for the role of

Product Manager for the pan-BBC AE&P system. The AE&P system is central to audio workflows, so as part of managing the AE&P roadmap, there is a focus on data integration with surrounding broadcast and business systems. The role is now titled "Solution Lead" but the work is the same

SESSION 7: AUDIENCE DATA (14:00 – 15:30)

Moderated by Tatjana Mladenovic (BBC)

14:00 – 14:25 Measuring total audience – the state of play for PSM

I will share an overview of the state-of-play of audience data developments in EBU public service media organizations. Using data and insights from our annual Media Intelligence Survey online data collection and a special audience measurement ad-hoc survey conducted in September 2022 among the heads of audience research in our member organizations.

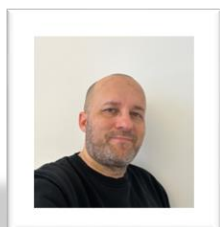


Francesca Cimino has been working in the EBU Media Intelligence Service since 2012, her area of expertise and responsibility is Audience Research. She is in charge of audiences related data collections and reporting, as well as following audience measurement industry developments. A core part of her role is supporting EBU Members to exchange on all areas of audience measurement and PSM audience research.

14:25 – 14:50 Audience analytics at NRK – present and future

As the audiences use of media fragments so does the data that we use to describe and measure that usage. There are now more data sources, more methods and more disciplines in audience research than ever. Consequently, there is a higher risk of different interpretations of those data, and a higher risk of competing views on what is actually happening in our organisations. How do we use all those data, and how do we try to keep all this together to ensure that we all work together with common goals.

This is the story of how we try to keep it together in the NRK.



Kristian Tolonen - Head of Audience Research, NRK

Working with audiences and data since -97 (19, not 18). Dept head since 2007. NRK's representative in all media measurement. Content and products are only tools for our mission, data are only tools to understand. 52 years, two kids, one partner and one cat with three legs.

14:50 – 15:15 Amplifying insights via user accounts

How introduction of unique user identifiers in analytics enables deeper insights into our audiences



Martyna Blass (BBC) works as a Lead Data Analyst at the BBC. Based in the Chief Customer Officer Group, her responsibilities include providing actionable insights about the BBC's services to deliver more value to the UK licence-fee payers and managing big-scale data analytics projects to support the BBC's digital-first transformation. Martyna has worked at the corporation for over 7 years and during this time has participated in the growth of the data discipline and its successful roll-out for decision-making processes at all levels. She is passionate about using data to optimise digital services and finding new ways to attract audiences.

15:15 – 15:30 Roundtable

SESSION 8: REACHING THE AUDIENCE (16:00 – 18:00)



Moderated by **Hanna Lukashevich** is head of the Semantic Music Technologies research group at Fraunhofer Institute for Digital Media Technology IDMT in Ilmenau, Germany. Among her research interests are audio signal processing, machine learning and AI. As head of the SMT group, she manages a number of R&D projects, both for companies in the digital media sector as well as national and international public projects

16:00 – 16:30 Explainable recommender systems for PSM

Generative AI offers TV broadcasters and OTT providers a chance to enhance user experience. OpenAI tech, such as ChatGPT, with its ability to understand content in a human-like manner and provide semantic targeting enables more sophisticated content discovery algorithms for video content.



Paolo Cremonesi is a professor of Computer Science Engineering at Politecnico di Milano and a co-founder of ContentWise, a company that provides personalized recommendations for media and entertainment. He has a MSc in Aerospace Engineering and a PhD in Computer Science. His research focuses on quantum computing, artificial intelligence and recommender systems. He has authored over 250 publications and received four best paper awards. He also holds nine patents in his field.

16:30 – 17:00 Explaining recommender systems to product owners: understanding the benefits and potential biases

We will focus on methods empowering product owners willing to understand how deployment of recommender system change the way users interact with content.



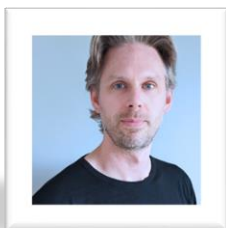
Pavel Kordík (Czech Technical University, Recombee) is AI researcher and entrepreneur based in Prague, Czech Republic. He is the CEO of Recombee, a leading recommendation engine software that develops technology to personalize news and media content for many private and public media organizations. In addition to his role at Recombee, Pavel also serves as Vice Dean at the Faculty of Information Technology at the Czech Technical University in Prague and co-founder of prg.ai.

17:00 – 17:30 Post-impressionism – from machine metrics to human insights

Discover how the BBC developed new attention metrics to measure engagement with short-form content.

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Iain Hoare is a Senior Principal Data Analyst at the BBC, specialising in viewability and attention metrics. Prior to finding his true calling in digital analytics, Iain spent several formative years working in editorial content production across radio, television and websites. Iain holds an MScR from the University of Edinburgh and enjoys road cycling.

17:30 – 18:00 Evaluating the coverage of a scientific topic on YouTube

The primary objective of my research is to determine how much and how a scientific topic is covered on Youtube.



My name is Lorenzo Canale and I am graduated in Cinema Engineering and Data Science, after having obtained a double degree at the Polytechnic of Turin and Telecom Paristech at Sophia Antipolis in France. I received a Ph.D. degree in Computer Science in December 2022; my research focused on Learning Analytics, i.e. the use of data to provide actionable intelligence in the educational field, in order to improve the learning and the teaching processes. I am currently working at the Rai CRITS research center on applications of AI to support journalism and fight disinformation.

THURSDAY 23 MARCH (09:00-15:45 CET)

ROOM MONTREUX

SESSION 9: AI FOR PRODUCTION

(09:00 – 10:30)

Moderated by Alberto Messina (RAI)

09:00 – 09:30 AI in vision – high quality video production and content automation

This presentation highlights how emerging AI-based technologies may support media workflows in order to speed up content production processes and to enhance existing content.



Maurizio Montagnuolo is a Senior Research Engineer working at the R&D Department of the Italian public broadcaster RAI. He graduated in Telecommunications Engineering and holds a Ph.D. in “Business and Management”. His interests are mostly addressed in the context of multimedia data mining and artificial intelligence, fields in which he counts several publications in international journals and conferences. He has been working on several EC funded projects in the field of digital archiving, automated metadata extraction and cloud technologies.

09:30 – 10:00 Automated high-volume lower-tier sports production

The goal of the project is fully automated workflows from arena to end users with no human interaction in the production chain except local commentators.



Are Tverberg is currently a solutions architect and team lead at TV 2 Norway. The team explores AI and machine learning services and solutions to optimize production and journalism workflows in the media house. TV 2 is a major partner in MediaFutures Research center for Responsible Media Technology in Bergen, and Are is co-lead of the WP3 Media Content Production and journalism technology work package. He is participating in the AIM and Newsroom EBU Tech work groups, and has contributed to the EBUCore and CCDM standards. He has also been participating in the NorDig EPG/Event Metadata Group. Are has former background as a journalist, news producer and newsroom workflow specialist in integrating NRSC, MAM and PAM systems at TV 2. He has been in the broadcast industry since 1990. LinkedIn: aretverberg, Twitter: @AreTverberg

10:00 – 10:30 Building an efficient video analysis platform for Deep Learning

In this talk, we show you how to build an efficient video platform for deep learning



Bram Zijlstra is a Machine Learning Engineer at Media Distillery. He is responsible for creating and developing software for TV Operators, Broadcasters and OTT Providers to improve the User Experience of their video services. Bram is passionate about applying scientific research and state-of-the-art technologies in new projects because of his ability to rapidly build prototypes and turn them into complex software and his passion for Natural Language Processing, Computer Vision and MLops.

ROOM GENEVA

SESSION 10: NLP FOR MEDIA

(09:00 – 10:30)

Moderated by Paolo Casagrande (RAI)

09:00 – 09:30 Explainable text similarity

Benjamin Kempinski (ArgML)

09:30 – 10:00 Microservices at your service – testing NLP tools in the European Language Grid

Introduction to the ELG platform hosting NLP tools as services with demonstrations and use cases with tools our Microservices project has made available.



Tiina Lindh-Knuutila, D.Sc. (Tech), has strong expertise in AI assisted language content management workflows. She has specified solutions for speech-recognition assisted live subtitling for the media sector and been Principal Investigator at Lingsoft in two recent EC-funded projects, MeMAD (2018-2021) and Microservices (2021-2023).

10:00 – 10:30 Using free-text queries to perform visual search in video archive

We are using the openCLIP model to enable freetext search in visual media content



Lubos Steskal (TV2N) A data scientist working at TV 2 focusing the most on using NLP and language technology to increase the efficiency of existing workflows and enable new functionality.

ROOM MONTREUX

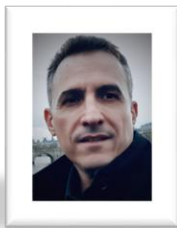
SESSION 11: CONTENT MONITORING

(11:00 – 12:30)

Moderated by **Hanna Lukashovich** (Fraunhofer IDMT)

11:00 – 11:30 The MeVer toolset for tackling media disinformation

A series of tools based on Artificial Intelligence to analyze the reliability of digital media content.



Nikos Sarris is a Senior Researcher at MKLab of ITI-CERTH, a member of MeVer (Media Analysis, Verification and Retrieval Group) and an advisor on media technologies at Athens Technology Centre. After receiving his PhD from the Aristotle University of Thessaloniki Nikos has been working in R&D projects as a researcher, project manager and coordinator of large multinational consortia. He has been involved in many projects focusing on the semantic 'understanding' of content and the assessment of its trustworthiness.

Olga Papadopoulou, a Research Associate at the Information Technologies Institute of Centre for Research and Technology Hellas (ITI-CERTH) and a member of the Media Verification (MeVer, <https://mever.iti.gr>) team. I received a Diploma degree in Electrical and Computer Engineering from the Democritus University of Thrace in 2012. Since April 2013, I have been working as a research associate at ITI-CERTH and have participated in several EU-funded research projects (REVEAL, InVID, WeVerify, MediaVerse, vera.ai) focusing on the field of detecting mis- and disinformation content.



11:30 – 12:00 STORA off-air television preservation

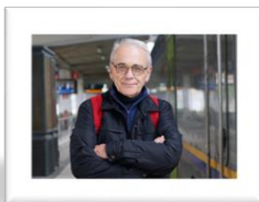
Introducing the open-source software and codebase used to record UK off-air television 24/7.



Joanna White joined the BFI in December 2019. As Knowledge & Collections Developer she is responsible for writing Python and Bash scripts to automate workflows across the National Archive, utilising open source tools wherever possible and sharing code via the BFI's GitHub pages. Before joining the BFI Joanna worked as a Developer Archivist at the Media Archive for Central England and has twenty five years experience as a documentary maker and camera woman for ITV regional news.

12:00 – 12:30 Media monitoring and AI in the age of audiovisual abundance

Research to achieve IA monitoring of audio-visual contents.



Enrico Menduni (Florence, 1948) has been full professor of "Broadcast Cultures", "Digital Media" and "Photography" at Università Roma Tre, public university in Rome, Italy. After retirement in 2018 he joined Universita Mercatorum private university in Rome, where he teaches "Digital Audio-visual Media" and "Digital Artifacts in Entertainment Business". He served as a member of the Board of Directors of Rai, Italian Public Service Radio and Television Corporation (1987-1993), and then of the National Council of Communications. CEO of ISIMM Ricerche, a small firm based in Rome, he has been the principal investigator of a vast Rai project aimed at monitoring representations of female figure, social cohesion, and pluralism, in addition to the contrast to hate speech, in public service tv programming in 2016, 2017, 2020, 2021, 2022 years. He also leads monitoring activities for private Italian broadcasters, including recommender systems. Author of more than 200 scientific publications, He has been also a professional

journalist, a screenwriter and docufilm director.

ROOM GENEVA

SESSION 12: SERVING AI

(11:00 – 12:30)



Moderated by **Paolo Casagrande** is a researcher at Rai R&D (CRITS), with a passionate interest for technology and its impact on people. He obtained a PhD in Computer Science at the University of Torino, investigating recommender systems applied to audio and radio. His work targets radio personalization and automatic metadata extraction with AI open tools.

11:00 – 11:30 Trainotate – an innovative approach to future productions serving AI



Mark Gülbahar is CTO of transfermedia production services and its metadata tech solution jay. After receiving his diploma degree in Computer Science in 2002, he joined the IRT – Institut für Rundfunktechnik (Institute for Broadcasting Technology). As a Senior Engineer he led the research in the application of metadata modelling, enrichment and content-based recommendations. Additionally, he conducted research in the field of semantic technologies, Named Entity Recognition and semantic Ontology Design along the media production and distribution chain. Within EBU, he actively contributed within the Metadata information Models (MiM) group towards EBUCore-RDF and the TV-Anytime Maintenance. From 2018-2021, he held the role of the technical and scientific coordinator of the dwarf research project, which linked the entire media value chain for content in the film business by lossless storage and intelligent cross-linking of metadata in a structured fashion. In 2021, he joined transfermedia to implement the first automated tech solution for metadata in film.

11:30 – 12:00 LandmarkNER – generating training data for landmark recognition

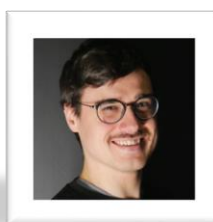
Automated Generation of Customized Training Data for Landmark Recognition in Videos using Named Entity Recognition

To assist with the creation of video content metadata, we expand our use of image recognition software. We want to recognize buildings with cultural, political, or geographical significance (landmarks) in videos. Due to the unique requirements as a regional broadcaster, we get the most out of landmark recognition software if we provide it with customized training data. As many archived videos are time-code-synchronized to rich content descriptions, an opportunity for partial automation of training data generation arises through Natural Language Processing (NLP).

By extracting landmark names from content descriptions, we can create the output labels for landmark recognition. In combination with simple object recognition models to detect architectural structures, we produce pairs of input data and output labels that can serve as training data for landmark recognition.

To find landmark names in texts, I trained a custom named entity recognition model with spaCy. I fine-tuned a German BERT model with 6450 annotated sentences. I used a multilingual entity disambiguation model (mGENRE) to disambiguate detected landmark names. To test the NLP pipeline, I created an interactive web app (https://huggingface.co/spaces/constantinSch/LandmarkNER_EL).

In a proof of concept, I combined the landmark named entity recognition with an open-vocabulary object detection network (OWL-ViT) to extract frames of landmarks from videos and tag them with the correct label. The results confirm that multimodal extraction of landmarks can be used to generate bespoke training data for custom image recognition.



Constantin Förster (BR) After completing my PhD in cognitive psychology at the University of Würzburg, I changed paths and did a traineeship as an information specialist in the archives of the Bayerischer Rundfunk. Since March 2023 I am a full-time employee and work on the automation of metadata creation and the use of machine learning techniques in the archive. I am particularly interested in innovative technologies for describing media content, especially in the field of natural language processing. My presentation is based on the final thesis of my traineeship.

12:00 – 12:30 Integrating open knowledge-bases and AI tools

Alberto Messina (RAI)

Maurizio Montagnuolo (RAI)

SESSION 13: GET VALUE FROM ARCHIVES (14:00 – 15:30)

Moderated by Kim Viljanen (YLE)

14:00 – 14:25 data.ina.fr – a portal to promote media analytics

Presentation of data.ina.fr and the data used to produce media analytics



Axel Roche-Dioré joined INA's consulting team in 2016 where he led projects for French and international clients. Since 2019, he has been working on the implementation of a data lake at INA and more particularly on bringing the Institute's business data into the data lake, first as project manager/engineer data, then more recently as team leader. Holder of a MA in cinema and a Master's degree in audiovisual and digital preservation, he contributed, within the framework of his various positions, to multiple archiving, preservation and data processing projects. He occasionally works as a trainer in the Master's "Audiovisual Heritage Management" at INA sup and in the Master's "Digital Technologies Applied to History" at the Ecole des Chartes. He also participated in the design and organization of the FRAME training program for an audience of international audiovisual archivists.

14:25 – 14:50 AI experiments for improved findability in the SVT media archive

AI experiments for improved findability in the new media archive at SVT



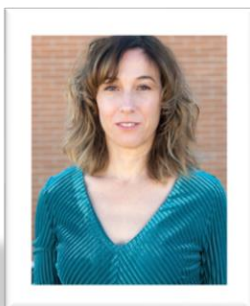
Mikaela Åstrand (SVT) is an AI engineer working at the Swedish public service broadcaster SVT. She has a strong interest in languages and is therefore particularly passionate about natural language processing applications.

Sally Ståhl (SVT) is a service designer at Swedish broadcasting company SVT. Sally is responsible for the user experience in the new media archive and has been working with design of services in professional environments for 10 plus years. She is passionate about making complicated systems easy and fun to work with.



14:50 – 15:15 When AI met the archive – challenges and milestones at RTVE

After 3 years of testing AI solutions, in 2020, RTVE launched an AI tender to automatically catalog the television archive. It was a long process in which the archive had performed a leading role. At this stage of the project, we can say that we have a better understanding of the technology, what works and what doesn't, mainly regarding speech technologies and NLP. This has had a direct impact on the goals and the scope of the project. There is a selected team within our archive already using the service and evaluating the results and it is only now when the different areas have started the discussion process about how to integrate human cataloging and artificial intelligence. On a wider scale, we have been organizing training sessions for all the archive staff, but we need to have a deeper discussion to get to know how they perceive the technology and whether they should take a more active role in its use. We have also learnt from the performance of image recognition that it is a very powerful tool but requires some customization, which we plan to develop in an identity recognition project based on TVE pioneers. This will be useful not only as an integrating tool in the archive, but also as a means to prove its utility and enhance its visibility and promotion. Finally, we need to understand the impact of automatic generated metadata in our system, since so far we have had no feedback from our users.



Virginia Bazán-Gil is Deputy Director at the RTVE Archive where she is in charge of innovation projects connected with automatic metadata creation and image recognition tools mainly for the archive but working with other business areas of the company. She is Secretary General at FIAT/IFTA (International Federation of Television Archives)

15:15 – 15:30 Roundtable

15:30 – 15:45 Wrap-up / next year

DATA TECHNOLOGY SEMINAR

AN EBU EVENT

DEMOS IN THE FOYER

1 **CERTH/MediaVerse - Media Asset Annotation and Management**

Nikos Sarris (CERTH - ITI)

2 **The EBUCorePlus CDK**

Alexandre Rouxel (EBU)

3 **Data isn't power, knowledge is power – knowledge-driven data reconciliation with Piloté**

Guillaume Rachez (Perfect Memory)

4 **Media Distillery - AI-based video analysis to improve UX and content discovery**

Adrian Arroyo Mirantes (Media Distillery)

5 **AI voices in Media**

Andrey Esaulov (BotTalk)

6 **Conversy AB - Voice biometric metadata for citizens and journalists**

Johan Classon (Conversy AB)

7 **SRG SSR - Content Research & Timelines**

Curdin Capol (SRF)

Travis Lee (SRF)

Sofia Orlova (SFR)

Romain Haenni (SRG-SSR)

8 **AI-based subtitling in every-day workflows**

Maarten Verwaest (limecraft)
