Project Silica: Glass – The Future of Long-Term Archival Storage
Dr. Ant Rowstron, Microsoft Research

In Project Silica we are exploring how to use fused silica (glass) as a media for future archival storage. It is an interesting media, as it is very robust and is not impacted by moisture, moderate temperatures, electromagnetic pulses and so forth. We store digital data in the glass and it does not suffer from bit rot and, and once stored in the glass, the data will be in the glass for ten thousand years! In the talk, I will cover glass as a long-term archival media, explain the properties of glass and how we create and read data in it and from it.

Smart Stacking II: Machine Learning and Information Science at PBS
Sally Hubbard, PBS
Maureen Harlow, PBS

This panel revisits the question of how to intelligently layer together the various data and information technologies currently on offer to answer real use cases, first explored at DAS 2018.
PBS has partnered with GrayMeta Curio, Amazon and the PoolParty Semantic Web Company to test out how running content through machine learning mechanisms may enrich taxonomies, and how taxonomies may improve machine learning. For example, can a stacked process improve matching Sesame Street clips to given curriculum/development standards and serve PBS's educational mission? Can it fuel a better recommendation engine for end users? Can it support internal media operations and processing? Does it result in a richly described archive of content?
The panel will present the results of the project, including issues raised and potential next steps.

Louis Armstrong House Museum
Ricky Riccardi, Director of Research Collections

Nearly 50 years after his passing, Louis Armstrong remains one of the 20th century's most iconic figures, still revered for his groundbreaking trumpet work and his chart-topping hits such as "Hello, Dolly!" and "What a Wonderful World." But many still do not know that in his private time, Armstrong was the Archivist for his own legacy, making tapes, writing manuscripts, compiling scrapbooks and much more, all in an effort to document his story "for posterity."

After Louis's passing in 1971 and the passing of his wife Lucille in 1983, Queens College took over the administering of the Armstrong House, opening the Louis Armstrong Archives in 1994 and the Louis Armstrong House Museum in 2003. Today, the Archives represent the world's largest archives for any single jazz musician, boasting thirteen separate collections devoted to Armstrong. The Archives were digitized thanks to a $2.7 million grant by Robert F. Smith and a new Digital Collections website was launched in 2018. Today, the Museum is preparing to incorporate the Archives in new and exciting ways with the imminent opening of a new cultural center currently being constructed across the street from the Armstrong House. Director of Research Collections Ricky Riccardi will tell the story of the Armstrong Archives in a multimedia-rich presentation featuring numerous excerpts from Armstrong's private tapes and other audio-visual materials from the collections.

Daily Wrap
Nick Gold, DAS co-chair

Grab lunch (on the West coast) or a beverage of your choice from your home bar and follow up on the sessions presented during the day, ask that burning question to a speaker whose talk got you thinking, and connect with colleagues.

MoMA: Public Lives, Private Spaces

The Museum of Modern Art's **Public Lives, Private Spaces** exhibition is a 100-screen presentation of virtually unseen, homemade works dating from 1907 to 1991. The exhibition opened in October, 2019 and explores the connections between artist's cinema, amateur movies, and family filmmaking as alternatives to commercial film production. Staged as an immersive video experience, the exhibition reveals an overlooked history of film from the Museum's archives, providing fresh perspectives on a remarkably rich precursor to the social media of today.

Bursting the Inverse Bubble: Audio and Video in the Information Economy
Chris Lacinak, President AVP

In the information economy, audio and video have historically been subject to extreme devaluation. This is due to a variety of factors ranging from the evolution of technology, systems, and standards to poor user experiences, big data glut, and narrow-minded solutions. The result, in economic terms, is an inverse bubble with regard to the value of audio and video as information. These media types represent the largest untapped and under leveraged source of information today. We stand on the cusp of a revolutionary change, ready to witness the bursting of this inverse bubble and watch audio and video information become as valuable as text in the information economy.

In this presentation, Chris Lacinak, CEO of AVP, will review the historic aspects of the devaluation of audio and video as information, offer some examples of current and recent game changers, discuss current roadblocks and challenges, and provide a vision for the next decade.

Media Technology Recovery
Kelly Pribble, IMES Media Recovery Technology Program
Alex Tomlin, IMES Engineering Team in Western Europe

While it is widely known throughout the music industry that analog and digital tape recordings from the 1970's through the 1990s pose numerous challenges to preservation often due to mishandling, improper storage, and composition, audio media can also be impacted by

technology obsolescence and the natural degradation of the media due to the passage of time. Recovery and remediation technologies are critical to reclaiming countless historic recordings from challenges such as mold, water damage, salt residue, sticky shed syndrome (binder hydrolysis), acetate spoking, lubricant loss, and many more.

Game of Thrones: Winter Came. We Archived It.
Michael Castro - VP, Post Delivery, Planning and Operations, HBO
Randal Luckow - Director, Archives and Asset Management, HBO

Game of Thrones is the most watched series in HBO's nearly 50 year history, breaking viewership records and becoming a cultural touchstone. Due to its massive popularity, HBO and the Northern Ireland government decided to build a fan experience in Belfast using all original sets, costumes, props, armour, set deck and frankly everything ever used on the show. As a result, Game Of Thrones transferred the biggest single collection of assets to the HBO Archive of any show so far.

Our work included simultaneously creating full inventories of all assets held by 13 different production department over 10 years, while making assets immediately available for reuse and repurposing, all while preparing to transition 48 categories and thousands of assets into long-term storage. The collection ranges from physical artwork, models, designs, blueprints, costumes, props, armory & weapons, etc. to digital assets including databases, directories, production paperwork, visual effects, created languages, plus picture & sound elements.

Our presentation will reveal what we found when we first arrived behind-the-scenes at Winterfell walking through the mud and snow, explore the realities of preserving a hit TV show and outline our approach to archiving the vast, diverse collection of assets. We'll discuss lessons we learned along the way, the current state of the collection, and the future plans for the fan experiences in Belfast (as much as we can reveal!). Today, HBO Archives manages all the production assets from Game of Thrones. Most importantly, we'll show how we played the Game of Thrones, and won.

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