Archiving 2010

June 1-4, 2010
Koninklijke Bibliotheek
Den Haag, the Netherlands

General Co-chairs:
Simon Tanner, King’s College London
Astrid Verheusen, Koninklijke Bibliotheek

www.imaging.org/ist/conferences/archiving/index.cfm
Table of Contents

Conference Overview ....................... 1
Conference At-a-Glance ..................... 1
Venue ........................................... 2
Behind-the-Scenes Tours ................... 3
Short Course Program ....................... 4
Short Courses At-a-Glance ................. 5
Technical Program ............................ 14
Accommodation Information ............... 17
Conference Registration ................... 18

Sponsors
IS&T thanks the

Koninklijke Bibliotheek/
National Library of the
Netherlands
and
MAM-A
for their support of Archiving
2010.

Conference Committee

General Co-chairs
Simon Tanner
King’s College London
simon.tanner@kcl.ac.uk

Astrid Verheusen
Koninklijke Bibliotheek
astrid.verheusen@kb.nl

Program Co-chairs
Robert Horton
Minnesota Historical Society
robert.horton@mnhs.org

Kate Zwaard
US Government Printing Office
kzwaard@gpo.gov

Short Course Chair
W. Scott Geffert
Center for Digital Imaging Inc.
scott@cdiny.com

Local Arrangements Chair
Frédérique Vijftigschild
Koninklijke Bibliotheek
frederique.vijftigschild@kb.nl

Technical Program Committee
Stephen Abrams
California Digital Library

Reinhard Altenhoener
German National Library

Maria Guercio
University of Urbino

Hans Hofman
Nationaal Archief Netherlands

Cathy Marshall
Microsoft Corporation

Phil Michel
US Library of Congress

Erik Landsberg
Museum of Modern Art

Stephanie Ogeneski Christensen
National Anthropological Archives, Smithsonian Institute

Steve Puglia
US National Archives and Records Administration

Judith Rag
Koninklijke Bibliotheek

Larry Telford
FamilySearch

Manfred Thaller
Universität Zu Köln

Steering Committee
Robert R. Buckley, Xerox Corporation
Franziska Frey, Rochester Institute of Technology
Suzanne E. Grinnan, IS&T
Robert Horton, Minnesota Historical Society
Simon Tanner, King’s College London
Astrid Verheusen, Koninklijke Bibliotheek/National Library of the Netherlands

IS&T Conference Organization
Alan Hodgson (3M Security Printing & Systems Ltd.), Conference Vice President
Suzanne E. Grinnan, Executive Director
Diana Gonzalez, Conference Program Manager

©2010 Society for Imaging Science and Technology (IS&T).
Conference Overview

Archiving 2010 will take place at the Koninklijke Bibliotheek (KB) near the Centraal train station in downtown Den Haag (see p. 2). The library provides a modern and welcoming environment in which to share research, meet colleagues from around the world, and learn about ways to collect, enhance, preserve, and share irreplaceable collections. A social program that allows for networking in culturally interesting and enjoyable venues has been planned to complement the week, which caps off with the perenially-popular Behind-the-Scenes-Tours.

Highlights of this year’s program include:

- A special half-day short course focused on international standards from capture to output followed by a number of new classes that complement this course.
- Many new short courses designed specifically to meet the needs of the European Archiving Community. See page 4 for details on all courses offered.
- Two and one-half days of technical sessions, including three timely keynotes and an Interactive Paper Session; a listing of the full program begins on page 14.
- Fascinating behind-the-scene tours of some of the Netherlands most important and treasured cultural institutions.

We hope you will join us for this exciting week and look forward to seeing you in June!

—Simon Tanner and Astrid Verheusen, General Co-chairs

Conference At-a-Glance

All technical sessions will take place at the Koninklijke Bibliotheek (KB)

<table>
<thead>
<tr>
<th>Registration Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuesday, June 1, 7.30 – 17.00</td>
</tr>
<tr>
<td>Wednesday, June 2, 7.30 – 17.15</td>
</tr>
<tr>
<td>Thursday, June 3, 8.00 – 17.00</td>
</tr>
<tr>
<td>Friday, June 4, 8.00 – 11.30</td>
</tr>
</tbody>
</table>

Tuesday, June 1
- Short Course Program (see p. 4)
- Welcome Reception: Escher Museum

Wednesday, June 2
- Keynote by Bas Savenije, General Director, Koninklijke Bibliotheek: Access to Digital Collections: Toward a National Infrastructure
- Technical Session: Digital Collections
- Conference Reception: Fotomuseum

Thursday, June 3
- Keynote: William Kilbride, Executive Director, Digital Preservation Coalition: Digital Preservation in Byte-sized Chunks: Good Practice, Best Practice, and Why We Should be Careful What We Ask For
- Exhibit of Digital Archiving Products and Services
- Technical Session: Capture, Imaging, and Workflow
- Interactive Paper Session

Friday, June 4
- Keynote: Martin Jürgens, photograph conservator and recipient of the 2010 HP Image Permanence Award: What Is (and What Isn’t) A Photograph Today?
- Technical Session: Access Strategies, and File Formats
- Behind-the-Scenes Tours (see p. 3)
Venue: Den Haag

The cultural capital of the Netherlands and seat of the national government, Den Haag (The Hague) is the venue for Archiving 2010. The conference will take place at the Koninklijke Bibliotheek (KB), the National Library of the Netherlands (#2 below), which is situated on the edge of the historic downtown area and adjacent to the main train station.

A lovely and charming city, Den Haag offers a wide variety of lodging and restaurant options, plus museums showcasing famous works such as Vermeer’s The Girl with the Pearl Earring (Maurits-huis museum), Mondrian’s Broadway Boogie Woogie (Gemeentemuseum), and many original works by Escher.

The Welcome Reception will take place at Escher in het Paleis (Escher Museum), which is housed in the Lange Voorhout.
Palace, a building that has been owned by the Royal Family for almost 100 years. The Conference Reception will take place at the Fotomuseum, a short tram ride from the KB.

Den Haag is situated on the Atlantic Ocean and a short tram ride takes you down streets lined with beautiful mansions and embassies, past the World Court, to the sands of Scheveningen. Walk the boardwalk and discover a plethora of beach-front restaurants featuring cuisines of the world served in dramatically-appointed and themed venues. The mile or so of dining establishments is erected each year in the Spring and disassembled in the Fall.

Den Haag is located less than one hour (~50 minutes) by direct train from both Amsterdam’s Schipol Airport (AMS) and Amsterdam’s Centraal train station. There are two train stations in Den Haag; be sure to get off at Den Haag Centraal.

**Behind-the-Scenes Cultural Institution Tours**

**Friday June 4, 2010**

Archiving 2010 is pleased to announce that the following institutions have agreed to open their doors to the very popular Behind-the-Scenes Tours the afternoon of June 4. Times and lengths will vary, but will be announced approximately one month before the conference so that you may work them into your travel plans. In general, they will end by 6 pm. See note at right for details on participating.

Institutions that may be among those offering tours include

- Nederlands Instituut Voor Beeld En Geluid/ Netherlands Institute for Sound and Vision
  www.beeldengeluid.nl/template_subnav.jsp?navname=english&category=english
- Koninklijke Bibliotheek
  www.kb.nl/index-en.html
- Van Gogh/Rijksmuseum
  www.vangoghmuseum.nl/vgm/
  www.rijksmuseum.nl

**Special Note on Tours**

Advance registration is required; space is limited and reserved on a first-come/first-served basis. Everyone who registers by the early registration deadline will receive details on the tours and how to sign up for them immediately following the early registration deadline. Others will receive details as they register. All tours are free, but participants are responsible for getting to the tour site by the stated time.
Introduction

Each year in technology there is a standout topic. For 2010 all eyes are on the increased interest in standardization.

This series of presentations and workshops is a must-attend event for any cultural heritage institution looking to improve and stabilize their digital imaging workflow. Now more than ever, creating and managing consistent authoritative digital content is a mission-critical function of any cultural heritage institution.

The recent economic downturn has brought the inefficiencies of traditional imaging practices to the forefront. The costs related to improper capture, multiple rounds of subjective image editing and proofing, are no longer acceptable. Without objective verification to standard imaging protocols, digitization initiatives can easily run off course.

Experts around the world have been working on the development of standardized imaging guidelines and methods of verification for image capture to ultimate output. While many of these methods have been applied individually over the years, the movement towards international standardization has reached a point of critical mass. Archiving 2010 is a unique opportunity to learn about state-of-the-art capture to output workflow and the in-depth information required for you to learn how to implement new imaging strategies.

To underscore the inter-related nature of today’s imaging workflow, a unique 4-hour morning track has been organized to provide a high-level overview of the entire standards landscape bringing together experts from around the world to give perspectives on various stages of the imaging workflow. In the afternoon, registrants can choose to attend in-depth workshops based on the specific key workflow elements. Instructors illustrate specific tools and technologies via live demonstrations and real-world examples. To round out the program, there are several single-topic sessions including microfilm as storage, open source OAIS tools, program management, and a focus on best practices for digitization of three-dimensional objects.

T1A: A Focus on International Standards: From Capture to Output
8.00 – 12.15 (4 hours)

This series of short presentations is intended to give a birds-eye view of best practices for cultural heritage imaging from capture to ultimate output with an emphasis on the growing trend toward international standardization. Imaging experts and users from around the world have joined forces to illustrate how international standards that exist today can improve image quality consistency while lowering costs.

Part 1: “Met en is Weten” (To Measure is To Know): The Standards Movement

Instructors: W. Scott Geffert, Center for Digital Imaging; Hans van Dormolen, Koninklijke Bibliotheek; and Michael Stelmach, Library of Congress (see bios under T1C)

In a spirit of true international cooperation this series of presentations highlights the recently introduced digitization guidelines in the US Federal Agencies Digitization Guidelines Initiative (FADGI) and the Netherlands Metamorfoze Preservation Imaging Guidelines, and their impact on cultural heritage imaging. As imaging is still a relatively new technology, cultural heritage institutions worldwide have struggled with maintaining consistent image quality between institutions, within institutions and, most importantly, when using outside vendors for photography and digitization. After many years of development and testing, these guidelines, along with
## Short Courses At-a-Glance

**Descriptions for short courses begin on page 4.**

<table>
<thead>
<tr>
<th>Time</th>
<th>Course Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.00 – 10.00</td>
<td>T2A: Making Digital Preservation Affordable: Values and Business Models</td>
</tr>
<tr>
<td>8.00 – 10.00</td>
<td>T3A: Practical OAIS: From Ingest to Access Using Free and Open-Source Tools</td>
</tr>
<tr>
<td>8.00 – 12.15</td>
<td>T1A: A Focus on International Standards: From Capture to Output</td>
</tr>
<tr>
<td>10.15 – 12.15</td>
<td>T2B: Managing Aesthetics: The Challenge of Imaging Three-Dimensional Objects</td>
</tr>
<tr>
<td>10.15 – 12.15</td>
<td>T3B: Microfilm as an Established and Innovative Solution for Long-Term Storage</td>
</tr>
<tr>
<td>8.00 – 12.15</td>
<td>T4A: Scanner &amp; Camera Imaging Performance: Benchmarking and Workflow Monitoring</td>
</tr>
<tr>
<td>13.15 – 17.30</td>
<td>T1C: Applied Imaging Standards (Image Capture)</td>
</tr>
<tr>
<td>13.15 – 17.30</td>
<td>T2C: Strategies for Asset/Project Management</td>
</tr>
<tr>
<td>13.15 – 17.30</td>
<td>T3C: ISO Proofing and Printing Demystified</td>
</tr>
<tr>
<td>13.15 – 17.30</td>
<td>T4C: Current Workflow Solutions for Benchmarking and Monitoring Image Quality</td>
</tr>
</tbody>
</table>

New tools to provide objective performance verification, represent a critical step toward improving the quality of digital collections worldwide. This will be the first time that the core similarities, as well as the subtle differences in these protocols that strive to achieve the same goal—improved imaging quality and consistency—will be presented.

### Part 2: Keeping Your Workflow on Track: Image Validation — Tools and Techniques

**Instructors:** Don Williams, Image Science Assoc., (see bio under T4A) and Dietmar Wüeller, Image Engineering (see bio under T4C)

While imaging standards are important, knowing that your imaging program meets these requirements is where verification becomes essential. New technical charts and accompanying software tools bring an array of scientific imaging performance tests within reach of smaller institutions and digitization vendors alike. The presentations highlight two methods of evaluating digital camera/scanner performance and validation to current ISO standards. Monitoring of imaging performance is a critical step that is often missing in digitization programs. This is a rare opportunity to meet the people behind the technology and to understand the design philosophies behind two approaches.

### Part 3: Breaking Down the Silos: Strategies for Maximizing Technology Investments and Deploying Standardized Images across Departments

**Instructors:** Howard Goldstein, Center for Digital Imaging, and Rob Hendriks, Rijksmuseum (see bios under T2C)

The program discusses the challenges facing institutions as they work toward sharing resources and collaborating using new technologies. As digital technologies have broken down many departmental divides of the past, it is important that imaging initiatives are closely coordinated with IT and museum management as a core strategic function. Using the recent changes to the imaging infrastructure of the Rijksmuseum...
in Amsterdam as an example, the instructors discuss the strategies, systems, and standards that have been incorporated into this innovative museum-wide workflow.

Part 4: When Pixels Meet Pulp — The Realities of ISO Proofing and Printing

Instructors: Markus Hitzler, basICColor GmbH, and Maurice Tromp, Van Gogh Museum

Markus Hitzler and Maurice Tromp illustrate best practices for image post-production utilizing the latest ISO standards via real world examples. Factors ranging from viewing conditions, display calibration, and printer calibration to working with print vendors are all critical aspects of a stable workflow. This presentation emphasizes process control methods. Many institutions have struggled with costly rounds of proofing and disappointing print quality. The instructors illustrate how standardization and process control directly improves quality and reduces production costs.

Benefits
This course will enable the attendee to:
- Gain an understanding of the state of internationally accepted best practices
- Understand the interconnected dependencies in today’s imaging workflow
- Understand how standards can save time and money
- Develop effective imaging strategies

Intended Audience: program managers in the archive, library, and museum community involved in best practices regarding the creation, organization, publication, or distribution of digital images. The morning session is intended to give attendees an understanding of overall imaging workflow. Those interested in gaining more in-depth information can choose to attend one of the four related short courses in the afternoon.

T2A: Making Digital Preservation Affordable: Values and Business Models
8.00 – 10.00 (2 hours)
Instructor: Simon Tanner, King’s College London

This course discusses the strategic perspectives toward being able to effectively finance digital preservation. The audience and other stakeholders define the economic factors by which digital information is valued, used, and ultimately retained. In looking to finance digital preservation there are a number of issues to consider including business planning, risk management, possible revenue streams, and a clear cost-benefit relationship.

The course offers a means of developing a cost and benefit justification for digital preservation to help secure the financial underpinning needed to make institutional digital preservation a realistic proposition.

Topics covered include models for monetizing content; the role of public repositories; cost, business models, and OAIS; balancing costs with benefits and the institutional mission; risk and consequences; and building your case. There will be time throughout for Q&A.

Benefits
This course will enable the attendee to:
- Justify and build a case for digital preservation
- Understand different cost and business models
- Understand the balance of costs and benefits with institutional mission

Intended Audience: managers in the archive, library, and museum communities involved with digital preservation or conservation strategies.

Simon Tanner is the director of King’s Digital Consultancy Services (KDCS) at King’s College London. KDCS provides research and consulting services specializing in the information and digital domain for the cultural heritage and information sectors. Tanner is also co-director of the
Desmond Tutu Digital Archive project with two South African partner institutions. He is an independent member of the UK Legal Deposit Advisory Panel and chair of its Web Archiving sub-committee. He is also a member of the JISC Digitization Advisory Group. Tanner authored the book Digital Futures: Strategies for the Information Age, with Marilyn Deegan, and they co-edited, Digital Preservation. Tanner is also leading the committee deciding how to digitize the complete Dead Sea Scrolls in Israel.

T3A: Practical OAIS: From Ingest to Access Using Free and Open-Source Tools
8.00 – 10.00 (2 hours)
Instructor: Peter Van Garderen, Artefactual Systems

This course guides participants through a series of clearly defined workflow steps based on an in-depth use case analysis of the OAIS functional requirements. Starting with receipt of a Submission Information Package, participants can move sample files through quarantine, identification, validation, metadata extraction, normalization, archival package preparation, and upload of Dissemination Information Packages to a web-based access system.

Each participant receives a USB key loaded with the open-source Archivematica digital preservation system (see http://archivematica.org). Archivematica integrates a number of free and open-source tools to create a comprehensive, OAIS-compliant solution and implements format-specific preservation plans based on analyses of significant properties, best practice preservation formats, and currently available normalization tools.

Participants are encouraged to bring a laptop for using their Archivematica USB key to follow along with the workflow demonstration and to get some first-hand experience with some of the tools packaged in Archivematica, including JHOVE, DROID, FITS, Xena, ImageMagick, Bagit, ICA-AtoM, and the Archivematica Dashboard.

Please note: This class is limited to 20 participants. If you plan to load the Archivematica USB key on your laptop, please arrive 30 minutes early.

Benefits
This course will enable the attendee to:
- Understand OAIS requirements
- Learn to move files through the workflow process
- Get first-hand experience using Archivematica

Intended Audience: IT administrators as well as anyone involved with collection management and conservation.

Peter Van Garderen is the Archivematica project manager and principal of Artefactual Systems, a Canadian company that provides open-source solutions for the international archival community, including the ICA-AtoM archival description software. He is a graduate of the University of British Columbia’s master of archival studies program and a doctoral candidate in archival science at the University of Amsterdam.

Short Course Fees
Mix and match courses. You pay by the total number of hours taken!

<table>
<thead>
<tr>
<th>If you register:</th>
<th>by</th>
<th>after</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 2</td>
<td></td>
<td>May 2</td>
</tr>
<tr>
<td>2-hours Member</td>
<td>€120</td>
<td>€150</td>
</tr>
<tr>
<td>2-hours Non-member</td>
<td>€140</td>
<td>€170</td>
</tr>
<tr>
<td>4-hours Member</td>
<td>€180</td>
<td>€210</td>
</tr>
<tr>
<td>4-hours Non-member</td>
<td>€200</td>
<td>€230</td>
</tr>
<tr>
<td>6-hours Member</td>
<td>€240</td>
<td>€270</td>
</tr>
<tr>
<td>6-hours Non-member</td>
<td>€260</td>
<td>€290</td>
</tr>
<tr>
<td>8-hours Member</td>
<td>€300</td>
<td>€330</td>
</tr>
<tr>
<td>8-hours Non-member</td>
<td>€320</td>
<td>€350</td>
</tr>
</tbody>
</table>

Students may register for any individual course for €50 until May 2 (€65 after).

IS&T reserves the right to cancel classes in the event of insufficient advance registration. Please indicate your interest early.

Archiving 2010
We begin with a discussion of how to interpret customer requirements when selecting components for an image acquisition system. We then introduce several imaging principles that provide a background to understanding imaging performance in digital acquisition and conversion. The use and adaptation of several standards and emerging institutional guidelines in museum or library environments is described. Several common problems faced by those providing imaging services, or seeking to improve image content are included. In each of the cases addressed, the discussion focuses on the selection and development of test plans, performance measurements, use-case acceptance criteria, and characteristics for tests targets and software. Suggestions and tools for corrective action for poor performance are also provided.

This course, focusing on methods for benchmarking and work flow monitoring, is intended to provide the complementary background for course, T1A: A Focus on International Standards from Capture to Output, which addresses several currently available solutions.

**Benefits**

This course will enable the attendee to:

- Establish accountability for imaging performance problems
- Describe several standards to characterize scanner and camera performance
- Evaluate manufacturers’ claims of resolution, dynamic range, and noise
- Identify sources of performance variation in digital image conversion
- Understand user requirements for analysis software tools
- Apply summary measures to monitor of imaging performance
- Develop test plans, and apply corrective-action solutions to ill-behaved performance
- Identify key questions to ask imaging professionals and service providers

**Intended Audience:** managers, engineers, and technicians interested in evaluating and monitoring scanner and camera performance, and emerging guidelines. This includes manufacturers, service providers, and content custodians. A working knowledge of digital scanner and camera operation and the common technologies is assumed.

*Peter Burns is with Carestream Health, Inc., working in image evaluation, modelling, and image processing for medical imaging systems. Previously he worked for Eastman Kodak Co. and Xerox Corp. He has taught imaging courses for many years, as an adjunct faculty member at Rochester Institute of Technology, at Kodak, and at previous Archiving conferences.*

*Don Williams is founder of Image Science Associates, a digital imaging consulting and software group. Their work focuses on quantitative performance metrics for digital capture imaging devices, and imaging fidelity issues for the cultural heritage community. He has taught short courses for many years, contributes to several imaging standards activities, and is a member of the Advisory Board for the interagency US Federal Agencies Digitization Guidelines Initiative (FADGI).*
T2B: Managing Aesthetics: The Challenge of Imaging Three-Dimensional Objects

10.15-12.15 (2 hours)

Instructors: Barbara Bridgers-Johnson and Joseph Coscia Jr., The Metropolitan Museum of Art, and Frans Pegt and Cecile van der Harten, Rijksmuseum

While the standards and best practices for digitizing two-dimensional artworks have been well documented, little attention has been given to best practices for the digitization of three-dimensional objects. Sculpture, furniture, ceramics, glassware, jewelry, etc. exist in many collections, yet the concept of standardization is often overlooked when it comes to the highly-subjective task of visualizing objects. Just as standardization is critical for works on paper, maintaining the quality and consistency of digitizing 3D objects should be a priority. This course highlights two successful object imaging programs from technical and aesthetic points of view. A discussion of the topic from a managerial policy perspective, is followed by one related to the photographic and technical challenges. The course provides examples of successful strategies, as well as common approaches to visualizing object across institutions.

Benefits

This course will enable the attendee to:
- Learn to develop strategies for improved 3D object photography
- Create more consistent, effective images
- Understand approaches to workflow quality control
- Develop equipment and staffing strategies
- Respond to changing institutional policies

Intended Audience: program managers in the archive, library and museum community, and imaging program managers.

Barbara Bridgers-Johnson is the general manager for imaging at The Metropolitan Museum of Art. In charge of the museum’s in-house photography program since 1986, she manages a department of nineteen photographers, assistant photographers, and administrative, printing, and production staff. Images created in the studio appear in the pages of award winning exhibition catalogs produced by the museum and on its website, and are represented in a myriad of merchandising products found throughout the Museum’s stores and satellite shops around the world.

Joseph Coscia, Jr. has been chief photographer at The Metropolitan Museum of Art since 2007, and a staff photographer since 1991. He oversees the daily workflow of images produced by eleven staff photographers, who share the common goal of establishing the highest standards in lighting, as well as imagery. His notable publications include Light on Stone: Greek and Roman Sculpture in The Metropolitan Museum of Art: A Photographic Essay (2003), Anglomania (2006), and European Furniture in The Metropolitan Museum of Art: Highlights of The Collection among many others. He is currently working on photography for European Sculpture in The Metropolitan Museum of Art with a publishing date of 2012.

Frans Pegt attended the photo academy in Apeldoorn. After graduation he continued his education at the Academy of Art in Rotterdam. Pegt has studied color management and the output in print work. In 1989, he started as an independent studio photographer specializing in advertising. In 1996, he was among the first in the Netherlands to change to digital photography. In 2007, he exchanged his photo studio for the studios of the Rijksmuseum. As a staff photographer he is responsible for the digitization of the collection of the Rijksmuseum in a standardized workflow.

Cecile van der Harten has been head of the Image Department of the Rijksmuseum, Amsterdam since 2006. van der Harten supervises five photographers across three studio locations and the Rijksmuseum photo archive, which supplies images to clients inside and outside the museum. Her department is responsible for the systematic digitization of the one million objects in the collection. The Rijksmuseum photography program has taken a modern standards-based approach to systematic capture.
Microfilm as a medium for long-term storage of documents can be found in almost every library or archive. One of its major advantages is the lifetime of up to 500 years, depending on the material and storage conditions. Besides classical applications, modern technologies such as laser film recording allow the storage of digital image data as high-quality color images on the film. Latest approaches even aim at storing any digital information on the film in the form of extremely small data points representing logical ones or zeros.

This course provides an overview of microfilm as a storage medium from different point of views. After a short introduction to state-of-the-art digitization and archiving in libraries and national archives, as well as a brief historical introduction to archiving on microfilm, a description of state-of-the-art laser exposure technology and its advantages to archiving on microfilm is given. A detailed overview on the storage of analog documents, including data organization and meta data insertion is provided. Finally, latest approaches to digital data storage on microfilm are presented. At the end of the course, there is a round table discussion for questions about microfilm.

Christoph Voges received a degree in electrical engineering from Technische Universität Braunschweig, Germany (2005), with a major in information technology. During his studies he visited the University of Southampton, UK, as an exchange student. After graduating, he joined the Institute for Communications Technology in Braunschweig, Germany. His particular research interests are modulation, channel coding, and channel models for microfilm as a medium for long-term data storage. He is also a member of the ITG Technical Committee 3.4 “Film Technology” of the Association for Electrical, Electronic, and Information Technologies (VDE), Germany.

Klaus Wendel is a historian specializing in science and technology. He graduated with a thesis about traction technology (2001) and a doctorate realize about a German mathematician and musicologist (2005) from Stuttgart University. Employed at several archival institutions since 1995, Wendel entered the ARCHE laser recording project with Fraunhofer IPM for the Landesarchiv Baden-Württemberg and Stuttgart University library in 2004. In 2007, he formed the Archium, to provide technological solutions for archival and historical institutions. He developed software for image preparation and meta data conjunction to improve the workflow of microfilm laser recording.

Dominik M. Giel graduated in laser physics (2000) from Bonn University and received his PhD from Duesseldorf University (2004) for his work on hologram tomography. Giel focused on optical information processing during a post-doc visit at CalTech and joined the Fraunhofer Gesellschaft in 2004 where he heads the group of Optical Microstructure Techniques.
Agencies Digitization Guidelines Initiative (FADGI)
• Configure a digital studio
• Learn about lighting options
• Understand camera selection/evaluation
• Gain a better understanding of software selection/software
• Develop museum-wide imaging policies
• Output workflow considerations for standardized capture and scanning

Intended Audience: program managers and photographers in the archive, library, and museum community involved in best practices regarding the creation of digital images.

W. Scott Geffert is president of the Center for Digital Imaging Inc., a New York-based consulting firm specializing in digital imaging workflow for cultural heritage institutions. During the past 15 years, Center for Digital Imaging (www.cdiny.com) has worked with museums worldwide helping establish best practices and solve complex workflow challenges. Geffert contributes to several imaging standards activities; is a member of the Advisory Board for US Federal Agencies Digitization Guidelines Initiative; and contributed to the development of the Metamorfoze Preservation Imaging Guidelines.

Michael Stelmach leads the still image group of the US Federal Agencies Digitization Guidelines Initiative, a cooperative effort to develop common digitization guidelines for still image materials (such as textual content, maps, photographic prints, and negatives). The expectation is this work will enhance the exchange of research results and developments; encourage collaborative digitization practices and projects among federal agencies and institutions; and provide the public with a product of uniform quality. It will also serve to set uniform quality and establish a common set of benchmarks for digitization service providers and manufacturers.

Hans van Dormolen began a career as quality manager in Metamorfoze for the National Library of the Netherlands (1999) after working for 15 years as a professional photographer. He is responsible for the technical quality of preservation substitutes, analog, and digital, and is the author of the Metamorfoze Preservation Microfilming Guidelines and co-author of Metamorfoze Preservation Imaging Guidelines.

Over the past several years the Rijksmuseum has completely transformed its digital capture workflow and the information management infrastructure that supports it, as part of a new master plan. The primary goal of this initiative is to efficiently image the entire museum collection and build an information infrastructure that provides image access to internal museum and external public users for years to come. This course will delve into the IT strategy and DAM implementation from a technical, use case, and stakeholder perspective. The program serves as a case study full of valuable learning experiences for anyone embarking on implementing institution-wide imaging policies.

Benefits
This course will enable the attendee to:
• Better understand imaging workflow
• Understand digital asset management
• Experience digital imaging workflow and use cases
• Appreciate stakeholder definition
• Learn project management

Intended Audience: IT managers, museum administration, digital imaging staff, and
those interested in the management, storage, and distribution of cultural heritage digital information.

Howard Goldstein, vice president of Center for Digital Imaging Inc., has been on the forefront in aiding Fortune 500 corporations and leading cultural institutions migrate their business practices to digital content creation, digital asset management, storage, and multi-purpose distribution. Goldstein has direct field experience in literally every commercial CIS and DAM application for cultural heritage use, and he is a proponent of open source solutions. Goldstein is one of the few people that speak the language of IT and photography.

Rob Hendriks has been the IT manager for the Rijksmuseum in Amsterdam since 1999 and is responsible for IT and information management. After receiving degrees in political science and information science, Hendriks started as an IT professional in 1988, mainly in the academic world. As project manager he was responsible for the implementation of the DAM, ERP, and CRM systems. He is also involved in developing the museum’s strategy for the web and social media.

### T3C: ISO Proofing and Printing Demystified
13.15 – 17.30 (4 hours)
Instructors: Markus Hitzler, baslCColor, GmbH, and Maurice Tromp, Van Gogh Museum

Museums worldwide continue to struggle with production challenges. Often times these problems can be avoided by establishing standards-based production methods and extending this workflow to print vendors. The Van Gogh museum has implemented standardized capture following Metamorfoze guidelines, as well as ISO standardized proofing and printing workflow. This approach to capture and print production has proven to be very effective. After a detailed explanation of the methods used to insure that print vendors are in compliance with internally generated ISO proofs, as well as methods for optimizing standardized captures for high quality art publications and licensing, methods and tools for the verification of ink jet proofs, displays, and press output to ISO standards are demonstrated. This unique course clarifies common myths and misconceptions regarding the realities of artwork reproduction across any media.

### Benefits
This course will enable the attendee to:
- Understand the key components of an ISO proof/print environment; establish a proper editing environment following ISO guidelines; learn how to prepare files for ISO printing and how to generate in-house ISO proofs
- Learn the full technical description of the eciRGBv2 L* based working color space
- Improve consistency and quality via objective verification
- Better manage outside vendors
- Gain knowledge related to print output and image postproduction workflow

### Intended Audience:
program managers and production staff in the archive, library and

### YOU DO THE MATH!

€495 = Non-member Registration

OR

€395 Member Registration

+€75* Membership

€470 = Conference Registration

IS&T Membership

Access to 16,000+ papers

Access to member database

JIST or JEI online subscription

Reduced Short Course Fees

IS&T Conference discounts

The Reporter mailed to you

Become a member when you register and use the member rate to calculate fees!

*Non-US address membership; based on Feb. 2010 exchange rate. Membership charged in US dollars at $105/overseas address; $95/US address; $25/students.
museum community involved in best practices regarding print publication. People involved in digitization of material that may be printed or distributed for print.

Markus Hitzler has been a project manager at basICColor GmbH (formerly Color Solutions) since 2001. The company offers the basICColor suite of color management products and support services, including tools to verify proofs and press targets to ISO standards. Previously, Hitzler was at X-Rite GmbH in Köln. He holds a BA in engineering from the University of Applied Science in Köln and is an active member of several Fogra groups.

Maurice Tromp, was employed by Kleurgamma (photo lab) in Amsterdam from 1999-2009. While there, he worked regularly with the Van Gogh Museum. Currently he has a full-time contract as an image technician from the museum, which has set up its own photo studio. Tromp is responsible for color management for production, especially delivery of files for print. He color manages digital files in eciRGBv2 in line with the ISO standards promoted at www.eci.org, by applying Fogra standards to calibrate the museum’s proofing system, and to check whether publishers’ prints conform to Fogra standards. He is also responsible for converting digital files and checking for correct color conversion with the Fogra Mediamine.

T4C: Current Workflow Solutions for Benchmarking and Monitoring Image Quality

13.15 – 17.30 (4 hours)

Instructor: Dietmar Wueller, Image Engineering

A short summary of the existing standards is followed by an overview of the existing and available test targets. Scans of these targets are typically evaluated using software tools in combination with individual specifications for different kinds of originals. The available tools demonstrations and potentials for an automation of the process are discussed. Based on the specifications, we define benchmarking objectives and show examples of how these can be determined. Reasons for real systems not meeting the specifications in the monitoring process are listed and addressed. Potential solutions for solving problems are presented with ways for long-term quality assurance for archiving systems. Last, but not least, the integration of systems into existing workflows—essential for a successful monitoring process—is discussed.

This course focuses on practical solutions for benchmarking and monitoring. The background information provided in T4A (p. 8) is helpful, but not essential.

Benefits

This course will enable the attendee to:

- Understand the basic process of image quality measurements
- Identify the existing standards and their practical relevance
- Identify exiting soft/hardware solutions
- Apply these solutions to individual workflows
- Define individual specifications based on given examples
- Understand the results from an image quality determination
- Take action when a parameter is out of spec
- Select appropriate equipment based on evaluation software and test targets

Intended Audience: managers, engineers, technicians, manufacturers, service providers, and content custodians interested in evaluating and monitoring scanner and camera performance, and emerging guidelines. A working knowledge of digital scanner and camera operation and the common technologies is assumed.

Dietmar Wueller studied photographic sciences at the University of Applied Sciences Cologne in Germany. Since 1997, he has run an independent test lab for digital cameras and scanners that has also developed into one of the leading suppliers for test equipment for digital image capture devices. Since 2000, Wueller has been the German representative to ISO TC42 WG18, and he is a member of the Board of the European Color Initiative. He is the author and coauthor of several books, and has taught several courses on image processing at the University of Cologne and the Electronic Imaging Symposium.
Technical Program

Wednesday, June 2, 2010

8.30 - 9.40
WELCOME AND KEYNOTE
Access to Digital Collections: Toward a National Infrastructure, Bas Savenije, Koninklijke Bibliotheek (the Netherlands)

9.40 - 17.10
DIGITAL COLLECTIONS
From the Site to Long-Term Preservation: A Reflexive System to Manage and Archive Digital Archaeological Data, Maria Esteva, Adam T. Rabinowitz, and Jessica Trelogan, University of Texas at Austin (USA)
Move It or Lose It: Investigating Portability of a System for Access to Government Information, Christopher A. Lee, University of North Carolina (USA)
Theories, Methods, and Testbeds for Curation and Preservation of Digital Art, Perla Innocenti, University of Glasgow (UK)
Assessing Digital Preservation Infrastructures: A Framework for Library, Engineering and eScience Organisations, Perla Innocenti and Seamus Ross, University of Glasgow (UK); Elena Macecuvite and Tom Wilson, Swedish School of Library and Information Science (Sweden); and Jens Ludwig and Wolfgang Pempe, Goettingen State and University Library (Germany)

Accessing Anthropology: Digital Collections at the National Anthropological Archives, Smithsonian Institution, Stephanie Ogeneski Christensen, Smithsonian Institution (USA)
Unplugging the DAM: Making Digital Asset Management Business Process Based by Deconstructing It, Howard Goldstein, Center for Digital Imaging, Inc. (USA), and Rob Hendriks, Rijksmuseum (the Netherlands)
Towards Policy and Quality Interoperability: Challenges and Approaches for Digital Libraries, Giuseppina Vullo, Perla Innocenti, and Seamus Ross, University of Glasgow (UK)
Archivematica: Lowering the Barrier to Best Practice Digital Preservation (Focal), Peter Van Garderen, Artefactual Systems Inc. (Canada)
The eArchive Service—A Practical, Cost Effective and Sustainable Approach for Preserving Authentic Electronic Records, Mark Pickering, AstraZeneca PLC, and Mark Evans, Tessella, Inc. (USA)
Gathering the Requirements for a Next Generation Digital Preservation Framework, Brian Aitken, Perla Innocenti, and Seamus Ross, University of Glasgow (UK)
A Digital Curation Curriculum for Museum Studies, Helen R. Tibbo, University of North Carolina at Chapel Hill (USA), and Wendy Duff, University of Toronto (Canada)
Examining the Aptitude of Tools for File Format Migration from TIFF to JPEG2000 Using the Planets Testbed, Sven Schlarb1, Edith Michaeler1, Brian Aitken2, Andrew Jackson2, Andrew Lindley4, and Max Kaiser1; 1Austrian National Library (Austria), 2University of Glasgow (UK), 3British Library (UK), and 4Austrian Institute of Technology (Austria)
Sustainability Issues in Public Broadcasting Archiving, Howard Besser and Kara van Malssen, New York University (USA)
Open Source Components, Standards Conformance, and UCD: Building Blocks for Successfully Managing and Enhancing an Established Digital Archive, Kathleen Murray and Mark Phillips, University of North Texas (USA)
Thursday, June 3, 2010

8.30 - 9.40
KEYNOTE
Digital Preservation in Byte-sized Chunks: Good Practice, Best Practice, and Why We Should be Careful What We Wish For,
William Kilbride, Digital Preservation Coalition (UK)

9.40 - 15.30
CAPTURE, IMAGING, AND WORKFLOW
Image Quality of Archiving Systems Measured Using the UTT and Metamorfoze Guidelines, Dietmar Wueller, Image Engineering (Germany), and Hans van Dormolen, National Library of The Netherlands (the Netherlands)
Image Quality Assurance for the Real World, Paul W. Jones and Chris W. Honsinger, Certifi Media Inc. (USA)
The Color of Black and White, Don Williams, Image Science Associates, and Peter D. Burns, Carestream Health Inc. (USA)
A Cost-Efficient and Automatic Digitization Workflow Using Commodity Hardware and Distributed Computing, Henrik Johansson and Erik Sjöra, National Library of Sweden; and Hamid Sarve, Uppsala University (Sweden)
Managing Visually Lossless Compression, Christy Henshaw and Dave Thompson, Wellcome Library; and Robert Sharpe, Tessella plc (UK)
Rich Data Imaging at the Van Gogh Museum, W. Scott Geffert, Center for Digital Imaging Inc. (USA)
A Practical Approach: The Quest for a Large-Scale Newspaper Digitization Workflow, Edwin Klijn, Koninklijke Bibliotheek (the Netherlands)
Image Validation in End to End Workflows (Focal), Peter Krogh, Peter Krogh Photography (USA)

15.30 - 17.00
INTERACTIVE PAPER SESSION
The Digital Afterlife of Kodachrome, Elias Kreyenbühl, University of Basel (Switzerland)
A New Approach to Accessing Images for Education, Kalliopi Vacharopoulou1, David Penfold2, Lindsay MacDonald2, and Pandora Mather-Lees1; 1The Bridgeman Art Library and 2London College of Communication (UK)
Investigations on Color Microfilm as a Medium for Long-Term Storage of Digital Data, Christoph Voges, Volker Märgner, and Tim Fingscheidt, Technische Universität Braunschweig (Germany)
Preservation Archiving StoringTechnologies, Keith Rajekci, Oracle (USA)
Analysis of Document Parameters for Scanning, Lindsay MacDonald, London College of Communication (UK)
Digital Asset Management Education and Training, Martyn Jessop, King’s College London (UK)
Visualization for Archival Appraisal of Large Digital Collections, Weijia Xu, Maria Esteva,
and Suyog D. Jain, The University of Texas at Austin (USA)
The Chrominance Measurement for Coloring Prints on Holographic Papers, Zhen Liu, Xiaoxia Wan, and Xinguo Huang, Wuhan University (China)
Applying User-Centered Design Principles to Redesign the Interface to the Portal to Texas History: The IOGENE Project, Kathleen Murray and Dreanna Belden, University of North Texas (USA)

Friday, June 4, 2010

8.30 - 9.40
AWARDS PRESENTATION AND KEYNOTE
What Is (and What Isn’t) A Photograph Today?, Martin Jürgens, photograph conservator and recipient of the 2010 HP Image Permanence Award (Germany)

9.40 - 12.40
ACCESS, STRATEGIES, AND FILE FORMATS
The Art of Preserving Digital Creativity in Planets, Andrew McHugh, Leonidas Konstantelos, and Matthew Barr, University of Glasgow (UK)
Demonstrating the Next Generation Preservation Framework, Thomas Wollschlaeger and Attila Zabos, German National Library (Germany)
Mass CD/DVD Migration: A Novartis Case Study, Daniela Bienz and Rudolf Gschwind, University of Basel; and Mario F. Pozzaand and Ludwig Gantner, Novartis (Switzerland)

PDF/A-2: The New Part of PDF/A, Thomas Zellmann and Mark McKinney, LuraTech GmbH (Germany)
Long-Term Preservation of Digitized Archival Documents and Digital Data on Laser-Exposed Color Microfilm at the National Archives of Sweden, Karl-Magnus Drake, National Archives of Sweden (Sweden); Christoph Voges, Technische Universität Braunschweig; Andreas Hofmann, Fraunhofer IPM; and Klaus Wendel, Archium (Germany)
The Digital Time Capsule and Other Applications of Microfilm, Florian Müller, Peter Fornaro, and Rudolf Gschwind, University of Basel (Switzerland)

Show Your Products to Archiving Attendees at the Exhibition on Thursday

The exhibition will run all day Thursday in the same space as the coffee break and Interactive Papers Session to ensure visibility and interaction.

Contact Donna Smith
dsmith@imaging.org
+1-703-642-9090 x107
Accommodations

We have contracted with the following hotels to offer special rates for conference participants, however for this meeting, you should feel free to try to locate others that may suit your needs better. Each hotel is holding a limited number of rooms at the noted rate. Most hotels have stringent cancellation policies, so be sure to review these with the hotel. All but the Kurhaus are within a 5-25 minute walk of the KB; the Kurhaus is within a 20 minute tram ride.

To make a reservation, download the appropriate PDF from the Archiving conference website. Hotel cancellation policies are very strict, so be sure to check with the hotel you choose as to their policy.

Hotels are listed from least to most expensive.

Ibis Den Haag City Center Hotel
- a modern 3-star hotel in the heart of the old town, an ~20-minute walk from the KB, (A on map, page 2)
- Single/double: €104 excluding tax and breakfast
- breakfast: €13 prepaid/day, internet €19,95/day
- Check in: 14.00 Check out: 12.00
- Reservation deadline: May 2, 2010

Mercure Hotel Den Haag Central
- a contemporary 4-star hotel located in the newer area of the city center, a 15-minute walk from the KB, (B on map, page 2)
- Single/double Weekday: €130
  Single/double Weekend: €95 excluding tax and breakfast
- breakfast: €19,50 prepaid/day, internet €19,95/day
- Check in: 14.00 Check out: 12.00
- Reservation deadline: May 2, 2010

Parkhotel
www.parkhoteldenhaag.nl/
- a mansion converted into a 4-star hotel located adjacent to the Palace Gardens and a 25 minute walk from the KB (D on map, page 2)
- Single/double room: €150/180, including internet access, but excluding tax and breakfast
- breakfast: €17,50/day
- Check in: 15.00 Check out: 12.00
- Reservation deadline: April 26, 2010

Eden Babylon Hotel
www.edenhotelgroup.com (locate Den Haag in listing on lower right)
- modern 4-star hotel adjacent to the KB (a 5-minute walk; C on map, page 2)
- Single room: €155, including internet access, but excluding tax and breakfast
- breakfast: €13,50/day
- Check in: 15.00 Check out: 12.00
- Reservation deadline: April 26, 2010

Steigenberger KURHAUS Hotel
www.kurhaus.nl/homeenglish.html
- a beautiful, Victorian Grand 5-star hotel, located directly on the beach in the Scheveningen district, an ~20-minute tram ride from the KB, (E on map, page 2)
- Single/double Town View: €175/€195
  Superior Sea View Room: €215/€235
- price includes breakfast, but not city tax of ~€5/person/night
- Check in: 15.00 Check out: 12.00
- Non-smoking facility; internet €22/day
- Reservation deadline: April 17, 2010
SAVE €!!! Not a member? Join IS&T and calculate conference fees based on member rates.*
Please charge the card listed below with the following membership:
___ $95 US address ___$105 overseas address ___$25 Student Total $ _____

CONFERENCE REGISTRATION FEE INCLUDES
• all the technical sessions • daily coffee breaks • Conference Proceedings
• Welcome and Conference Receptions • Optional Behind-the-Scenes Tours

There is no online registration for this event; fax form to +1-703-642-9094.
All fees charged in Euros. You must register by May 27, 2010 to use this form; after that date, registration must be done in person at the conference venue.

Conference Registration (CHECK ONE)

<table>
<thead>
<tr>
<th></th>
<th>until May 2</th>
<th>after May 2</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>___ IS&amp;T Member</td>
<td>€395</td>
<td>€470</td>
<td>€</td>
</tr>
<tr>
<td>___ Non-member</td>
<td>€495</td>
<td>€570</td>
<td>€</td>
</tr>
<tr>
<td>___ Speaker/Session Chair Member</td>
<td>€355</td>
<td>€430</td>
<td>€</td>
</tr>
<tr>
<td>___ Speaker/Session Chair Non-member</td>
<td>€395</td>
<td>€470</td>
<td>€</td>
</tr>
<tr>
<td>___ Student (ID required) Member</td>
<td>€125</td>
<td>€145</td>
<td>€</td>
</tr>
<tr>
<td>___ Student (ID required) Non-member</td>
<td>€150</td>
<td>€170</td>
<td>€</td>
</tr>
</tbody>
</table>

___ One-day □ Wed □ Thurs □ Fri €265 €300 €

Short Course Registration

Be sure to multiply number of classes by per course fee and place on total line.
Classes are charged per total number of hours taken. See page 3 for schedule. Mark which class you will take. Calculate total class hours taken and check appropriate amount below.

Two-hour classes (check up to two): □ T2A □ T3A □ T2B □ T3B
Four-hour classes (check up to two): □ T1A □ T4A □ T1C □ T2C □ T3C □ T4C

Member | Non-member
--- | ---
___ 2-hours of classes | €120 | €140
___ 4-hours of classes | €180 | €200
___ 6-hours of classes | €240 | €260
___ 8-hours of classes | €300 | €320

***ADD €30 to each price category after May 2.***

***Students may register for any short course at €50 each until May 2 and €65 after that date.***
Student: ______ total classes x €50 (€65 after May 2) € ____

Other
___ Extra Archiving 2010 Proceedings (special advance purchase/on-site rate) €60 € __________
___ Additional Reception Tickets (Welcome and Conference) €75 € __________

GRAND TOTAL € __________

Payment Method: □ MC □ VISA (We cannot accept AmEx for this meeting.)
Card#: __________________________ Exp. Date: ____________
Name as it appears on card: ___________________________________________________________
Authorization Signature: ___________________________________________________________

Return this form with signed credit card authorization or check payable in Euros to IS&T, 7003 Kilworth Lane, Springfield, VA 22151 or fax to 703/642-9094.

Please note: To cover bank charges and processing fees, there is a cancellation fee of €50 until June 1, 2010. After that date, the cancellation fee is 50% of the total plus €50.
No refunds will be given after July 1, 2010. All requests for refund must be made in writing.

*Membership is charged in US dollars. You will be contacted about your complimentary journal subscription choice.