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Abstract
Social media has begun to migrate from a predominantly text-based medium, through photography and into cinematography and edited video. Film is a vital medium through which we not only capture our world, but also seek to understand it. This workshop explores an emerging area of research within the CHI community that focuses on applying filmic techniques in two different ways; 1) to automatically interpret personal data and to allow users to interact with personal data, and 2) to explore film as a vehicle for the personal curation of digital identity. This multidisciplinary, one-day workshop will bring together social scientists, cinematography experts, ethnographers, semantic and graphics engineers together with general HCI practitioners to explore and evaluate individual and community representations on film, new ways of translating traditional social media data into film, the engineering challenges of automatically rendering filmic media, and the critical role such automatic and semi-automatic systems can play in persuasion, understanding, and empowerment.

Author Keywords
Cinematography; Digital Identity; Interactive Media; Film; Video; Story Telling
Background and Rationale

Introduction and Motivation: Why?

We can trace a history of social media in terms of its migration from a predominantly text-based medium, through photography and into cinematography and edited video. Film has become a vital medium through which we not only capture our world, but also seek to understand and interpret it and imagine possible futures. In recent years, film has become an important issue for the CHI community, as a means of envisionment in participatory design practice, as a source of ethnographic evidence via online repositories and as a tool for disseminating ideas, particularly to audiences beyond the community. This transition is unsurprising as, in the latter part of the 20th and early 21st century, film and television became dominant as both a means of communication and entertainment.

This workshop will deal with the use of film as a vehicle for the personal curation of digital identity. Engaging the CHI community on this issue now is timely — recent commercial applications such as Intel’s Museum of Me (see Figure 1) or Facebook’s Lookback have begun to explore the automatic generation of filmic narrative from digital data. We are particularly interested in the value of such biographies, as they offer a new lens onto an individual’s online persona.

Meanwhile, film collections are becoming more commonplace as a means of community representation (e.g. in the health field, where health charities such as the Alzheimers Society have developed Youtube channels as a means of representing the lives and issues of their community more directly). The establishment and maintenance of film collections such as these present new challenges relating to editorial responsibilities and ownership of communities’ online representation. Recently, the use of film as a means of transforming, understanding and interacting with data has become of special interest for researchers and practitioners within the areas of data visualisation and big data analytics [1]. We have yet to develop a suitable research framework for making sense of these new developments, both in terms of understanding the social context and social implications of the use of film as a transformational tool for personal data, and in terms of the engineering challenges and techniques currently under research.

Film can be regarded as a type of visual storytelling. People often interpret their experiences, desires, and motivations using stories, and the use of narrative to make sense of our everyday lives is considered a fundamental human behavior [8]. The exploration of narrative formats for data presentation can help Designers and HCI researchers understand how meaning is constructed through stories and how stories can be used to interpret data.
Our capacity to create and store digital information about ourselves has arguably outstripped our ability to curate and access that information effectively [5, 2, 4, 3, 6]. Many people have described an acute sense of regret about some of the things they have posted online [9, 10] and report that they are gradually relinquishing control of their digital selves, effectively “losing awareness of what exists, where it is, who has access to it, who is accountable for it, and what is being done with it” [7]. Automated filmic narratives such as Facebook’s A Look Back and Intel’s Museum of Me offer a means to help users understand and review their own data through brief automated biographies. Some commercial developments are also assisting in the curation of tangible records of digital data, such as the MySocialBook movement, whereby Facebook account holders can pay to edit their digital content to be printed in a glossy book (see Figure 2). However, the ability to allow genuine user creativity within these systems is limited, and they are also potentially open to abuse. What are the ethical implications of systems that tell stories for—or about—us? The technology to automate or semi-automate the film making process is being developed and raises key questions and opportunities for HCI researchers, varying from the practical question of how to do it, to the more profound questions of why it is done and what the effect on us might be. Issues raised extend outside the area of personal digital data into the area of communities and how they see themselves, to data visualisation techniques for a growing sea of available data. As such, a forum to discuss these new techniques, the issues that surround them, as well as to offer some concrete examples of the type of media that can be generated would help shape the research methods and directions in this novel area for years to come.

Figure 2: MySocialBook https://www.mysocialbook.com, which allows Facebook content to be transformed into a tangible book. Above, an example of using this as a cultural probe to explore identity and meaning in personal digital data. As with MySocial book, filmic transformation of digital media offers opportunities for the reinterpretation and understanding of personal digital data.

The engineering techniques which attempt to automate film generation create a tension with the social and psychological role of digital personhood. Who controls the narrative in such data? If we automate the presentation of data do we remove the users control of how such data is presented? Who owns the output? The insight that transforming media into new forms can give has a value- who benefits from this value and how?
Themes and Methodologies: How and What?
Two key themes will drive the workshop:

- Methods and approaches to automatic film generation from digital data. This includes understanding the rendering process from an engineering perspective, how the manual process of film making might be transformed, new design and creative techniques and the automatic analysis of meaning, events and relevance.

- The role of film making for the curation of digital data for both the individual and the community. The democratization of the film process and how this impacts authenticity and empowerment.

The first is centred on how to generate automatic and semi-automatic filmic output given our rapidly increasing pool of digital data, the second on what the implications of using filmic approaches are for the understanding and experience of digital data. Bringing engineers, designers and social scientists together is a key to our workshop approach. As we explore what it is possible to build and what it might look like, we will also explore what it might do and how it might be used.

Goals and Outcomes
The workshop will produce feedback for the broader CHI community about why filmic approaches to personal data are relevant and timely, how technology will change and present opportunities in this field, and what the future will hold for film making.

Our goals are:

1. To generate ideas and approaches that attendees can apply in their own research.
2. To foster collaboration, knowledge exchange and expertise across diverse research, design and engineering communities.
3. To develop a strong research framework, both in terms of understanding the social context and implications of the use of film as a transformational tool for personal data, and in terms of the engineering challenges and techniques currently being researched.

Participants
The workshop aims to bring participation from a wide range of researchers and engineers within the CHI community, including research and commercial engineers, film makers, ethnographers, social scientists and general HCI practitioners. The organizing committee reflects these diverse interests and will attract a broad range of attendees. In particular, with both our Bay Area organiser, and with the location so close to many key US tech companies, we look forward to significant commercial engagement. We have already received some significant notes of interest in the proposed workshop and expect to fill our 25 attendance limit.

Pre-Workshop Plans
November: Setup the workshop review panel from experts within the workshop remit. Create a website hosted at the University of Edinburgh for information and input from workshop attendees. Secure sponsorship funding from interested commercial organisers to support a social event post-workshop.
**November/December:** Distribute the CfP (e-mail, social media, in person). Directly invite submission from researchers and practitioners that the panel sees as valuable potential contributors to the workshop.

**December:** Review early acceptance applications. Criteria: What will the attendee add to the workshop and what will their benefit be in attending. Early acceptance round notifications sent to applicants by December 21st 2015.

**January:** Attendee list finalised. Request for attendees to comment on three areas: a) The impact of film as a medium for understanding and communicating digital data, including the social impact and user experience of transforming personal digital data into such types of media (for individuals or communities), b) Design and technological paradigms that consider the automatic and semi-automatic creation of film from digital content, c) Exploration of utopian or dystopian futures based on film as a democratized communication device that can inspire debate on the what and the how of using film to curate personal digital data.

**March:** Upload of website of themes contributed by attendees and final program. Distribution of attendee information and comments to all attendees (but not publicly) to facilitate an initial pre-workshop introduction. If over subscribed, invite rejected applicants into a community of interest with workshop members.

**Workshop Structure**

Participants: 20–25

- Exploring our own data footprint: Activities will include: reviewing semi-automated digital personhood data in book-form (see Figure 2), and the issues that arise; a review of several existing digital personhood films (see Figure 3) which have been created to capture identity; a discussion of genre conventions, and a subsequent review of one data set (most likely film examples) which has been constructed with a personal as well as a public audience in mind, to encourage participants to reflect how they might construct a personal data film.

- Within group discussions focusing on ethics, dangers and opportunities in this emerging field. Use of attendee comments and applications to frame discussions.

- Technological probe: Automating visual autobiography. This will include a demo of some automatic systems (Triptych, DigitalMe etc).

- What can we build and should we build it: Group work looking at technical opportunities and challenges conducted following the template of Robert Dilts’ “Disney Brainstorming Method” using the four thinking styles of outsiders, dreamers, realisers and critics.

- Future collaboration between attendees. Informal opportunity to swap contact details and suggestions for future contact.

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**Figure 3:** A still from the film “Alice”—A Social Media Journey Directed by Louise Cooke commissioned by the EPSRC ReelLives project to explore filmic approaches to personal digital data.
• Producing a draft of the post-workshop report for the web page, and an after workshop action plan.
• Social Event

Post-Workshop Plans
• Publish workshop report on website.
• Send final action plan to attendees and community of interest.
• Follow up with actions as appropriate.

Biographies of Workshop Organisers
Matthew P. Aylett
Matthew founded Cereproc Ltd in 2006 with the aim of creating commercially available, characterful speech synthesis. In 2007 Cereproc released the first commercial synthesis to allow modification of voice quality for adding underlying emotion to voices. He has remained active both commercially, where he dictates Cereproc's technical strategy, and academically, as a research fellow at The School of Informatics at the University of Edinburgh, where he was awarded a Royal Society Fellowship looking at speech and personification. Matthew has substantial commercial engineering and product development management experience together with a broad international research background in prosody, dialogue engineering, affective computing, novel interface design and psycholinguistics. Speech is a fundamental element of storytelling, and his interests have extended from this into the field of automatic visual and multi-modal narrative generation.

Lisa Thomas
Lisa joined the Psychology and Communication Technology (PaCT) research group at Northumbria University in 2008. She is currently working on the ReelLives project - an EPSRC funded project on digital personhood. The project is exploring new ways to represent our digital lives in filmic form, offering individuals the chance to reflect on their online identities and to edit their digital selves. She has also worked on the IMPRINTS project collaborating with a number of UK institutions, asking about the influences on UK and US publics to engage and/or disengage with identity management practices, services and technologies of the future. Her PhD, completed in 2011, explored the perspectives of diverse user groups within the local community to better understand privacy and security concerns when using Location-Based Services.

David P. Green
David is a documentary filmmaker and HCI researcher, with ten years experience working at the intersection of video production and HCI. David began his career as a medical videographer and editor for specialist scientific films, but spent a number of years as a filmmaker working with the Digital Interaction Group at Culture Lab, Newcastle. He is currently completing a PhD as part of the AHRC Creative Exchange Knowledge Exchange Hub where his research focuses on the design of digital systems to support non-professional participation in linear and interactive documentaries. This has involved developing co-design methods for grassroots and participatory documentaries, with a particular focus on interactive documentaries as a format that lends itself naturally to multiple perspectives. David's recent work has included collaborations with academics from across the UK and various commercial and third-sector partners including the BBC, Wildscreen, Co-Opera Co and Cohda Design.

David A. Shamma
David Ayman Shamma is a Director of Research at Yahoo Labs and Flickr where he runs the HCI Research group. His primary research area is social computing: how people interact, engage, and share media experiences both on-
line and in-the-world. Focusing on creative expression and sharing frameworks, he designs and prototypes systems for multimedia-mediated communication, as well as, develops targeted methods and metrics for understanding how people communicate online in small environments and at web scale. Ayman holds a B.S./M.S. from the Institute for Human and Machine Cognition at The University of West Florida and a Ph.D. in Computer Science from the Intelligent Information Laboratory at Northwestern University. Before Yahoo!, he was an instructor at the Medill School of Journalism; he has also taught courses in Computer Science and Studio Art departments. Prior to receiving his Ph.D., he was a visiting research scientist for the Center for Mars Exploration at NASA Ames Research Center.

Pam Briggs
Pam holds a Research Chair in at Northumbria University where she set up the Psychology and Communication Technology Lab (PaCTLab) and she also holds title of Visiting Professor at Newcastle University’s Culture Lab. She is a psychologist with a particular interest in how the design and use of social media can influence people’s lives and attitudes. She is particularly interested in the ways in which social identity is managed online and seeks to understand why, when and how people develop trust in unknown others. She has an international reputation for her research work in this field and a significant record of leading successful UK and European funded projects. She uses participatory and value-sensitive design practice and makes use of a range of innovative film and theatre techniques. For example, her work on invisible design demonstrates the value for designers in creating short films that show the function and impact of their designs without ever seeing the literal design form. Such films can be used for design envisionment and can aid the development of improved user experience.

Finola Kerrigan
Finola is a Senior Lecturer in Marketing at Birmingham Business School, University of Birmingham where she teaches and researches marketing and consumption. Finola’s research is in the field of marketing, specifically marketing within the arts and cultural industries. To date this research has focused on production and consumption issues in film and the visual arts, topics related to social media and branding. Finola is also interested in the social role of the arts and subsequently organised an ESRC funded seminar on Social Arts Marketing as part of the ‘Rethinking Arts Marketing’ Seminar series.

Call for Participation
This workshop aims to bring together people social scientists, cinematographers, ethnographers, graphical engineers and HCI practitioners interested in the ways personal digital data can be captured on film, either automatically or using more curatorial approaches. We hope to foster collaboration across diverse communities and to develop a strong research framework that considers social as well as engineering implications in this field. The workshop will take a Disney Approach, using four specific thinking styles to guide our debate, incorporating hands-on-exercises to explore film created using digital data.

We welcome submissions from people with expertise from diverse research, design and engineering communities who feel they will benefit from, and can engage in, discussions around film as a vehicle to curate personal data.

Applications-to-attend should be a maximum of 2 pages in length (no special formatting required) and include:

- A biography of the author(s)
- A summary of previous work relevant to the workshop and/or an explanation of your interest
- A short response to one of the following provocations
What is the impact of film as a medium for understanding and communicating digital data?

What are the key design and technological challenges facing automatic and semi-automatic creation of film from digital content?

How might a utopian or dystopian future manifest, where film has become a democratized communication device?

Suggestions for materials, content or methods for us to include in the workshop.

Visit http://mylifeonfilm.me/apply/ to apply, and view our website

If we are over-subscribed we hope applicants who cannot attend will consider taking part in a community of interest for the wider dissemination of workshop outputs.

Please note: One author from the application-to-attend must be able to attend the workshop (and register for a minimum of 1 CHI day).

References


