Panel

The Future of Online Social Interactions: What to Expect in 2020

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PANEL OVERVIEW

Blogs, wikis, tagging, podcasts, and social networking websites such as MySpace, Facebook, Flickr and YouTube have radically changed user interactions on the World Wide Web from a static, one-way, consumption model to a dynamic, multi-way, participation model. Broad user power and flexibility have changed how people engage in and experience their interconnections, interests, and collaborations. Online social interactions will evolve in the next decade to address the growing needs of its user community and make entries into many aspects of our lives. This evolution may very well be among the most exciting ones of our times where the individual and collective power of people to contribute and share content, experiences, ideas, expertise etc. may be even more enhanced than it is today. The enhancement may be shaped through a better understanding of user needs and behavior and it may be enabled through the seamless convergence of multi-modal technologies, new applications, new domains, data mining and better navigational and search capabilities. Some of these changes will also permeate into the workplace and change the way we work. This panel will discuss how online social interactions may evolve in the next decade and what impact it may have on diverse dimensions in our world.

Biography: **Dr. Lada A. Adamic** is assistant professor in the School of Information and the Center for the Study of Complex Systems at the University of Michigan. Her research interests center on information dynamics in networks: how information diffuses, how it can be found, and how it influences the evolution of a network's structure. She worked previously in Hewlett-Packard's Information Dynamics Lab. Her projects have included identifying expertise in online question answer forums, studying the dynamics of viral marketing, and characterizing the structure in blogs and other online communities.

Biography: **Dr. Marc Davis** is Social Media Guru at Yahoo! Inc. His work focuses on creating the technology and applications that will enable daily media consumers to become daily media producers. His research encompasses the theory, design, and development of digital media systems that leverage contextual metadata and the power of community to enable people around the world to produce, share, and remix media. Marc earned his B.A. in the College of Letters at Wesleyan University, his M.A. in Literary Theory and Philosophy at the University of Konstanz in Germany, and his Ph.D. in Media Arts and Sciences at the Massachusetts Institute of Technology Media Laboratory.

Panel Statement: Frank Nack

Despite the fact that we already see the approach of the 'social network fatigue' syndrome it seems to me that the social aspect of media generation and consumption on the web will grow. The key push for this development will be the wish of humans to share experiences in a globalised and nomadic world, where the trace replaces the tag. The most valuable experience challenges our assumptions and perspectives and ultimately alters our understanding of information and thereby our own internal model of the world. In this sense, challenge is indeed the challenge we face for information systems. Current systems utilise similitude as selector of new experience. 'If you liked that then you'll like this'. However the more profound and hence lasting experiences are the unexpected ones that are at once accessible and confrontational. It is easy to be either, but being both is a demanding challenge. So far we have little capability in marshalling such experience for users but in 2020 this will be different.

The basis for social online interaction is to root technological developments in the understanding that information interest is based on sensory experiences that is shaped and filtered by emotional and cultural memories. Exploring a museum, a city or a virtual knowledge space is an infinitely personal experience that exists as a multi-modal / multi-media memory that constantly changes as we experience again and again - and we would like to communicate this change. The sensory experience can be determined by many different factors: navigation, speed, focus. In addition we perform actions that act as component of our strategy to achieve the goal: random exploration of the physical space or the intellectual space, follow the shortest paths to reach artifacts in a museum or places in a city, or look for different intellectual invitations. How we proceed depends on our experiences of similar places or events. If a system has access to some of these components it can to some extend

predict our interest and thus serve our information and communication need. Thus social online interaction will be rooted in contextualised traces we leave wherever we want to. Social online interaction will be mobile and immersive interaction.

Biography: Dr. Frank Nack is tenure associate professor at the Human-Computer Studies Group of the Informatics Institute of the Univ. of Amsterdam. He obtained his Ph.D. with a thesis on "The Application of Video Semantics and Theme Representation for Automated Film Editing," at Lancaster University, UK. The thrust of his research is on the representation, retrieval and reuse of media in distributed hypermedia systems, educational hypermedia systems that enhance human communication and creativity, computational applications of media theory & semiotics, automated video editing, interactive storytelling, and computational humour theory. He is on the editorial board of IEEE Multimedia.

Panel Statement: David Ayman Shamma

The web is about people: people who interact with other people through a flurry of emails, instant messages, media, and RSS feeds. Often, APIs, protocol, and resource driven technologies become the focus of how we think as researchers, designers, and engineers. The techno-centric view of the web does not fully account for the social world. Who we are has become the sum of every blog post to every Flickr upload. Our posts create conversations online (such as asynchronous comments on a video) and offline (talking about an online video while getting a coffee). The volume of digitally mediated communication is rising with our growing and ever-present connectivity and mobility. Greater connectivity brings new experiences from mobile applications to web-social platforms. Where once we examined signal to noise ratios, we now turn to examine online life narratives present in social connection to friends, family, communities, and the world.

The future of online social interactions requires a conversational redux. Content semantics alone is not sufficient. How we consume media (photos and videos) will become conversation centric. Conversational semantics, found in the conversations that ensue around media, is as important as traditional content-based semantics. Today, the same image posted to Flickr and to Facebook brings different conversations. As we extend beyond asynchronous threads, we must look at how people are implicitly and explicitly sharing media with their communities and understand the supporting online social context. Conversational semantics will be an inherent part of the experience and a primary area of investigation for future research. Early research in conversational semantics has begun from synchronized sharing of video-on-demand, to live streaming to geo-social platforms. As we begin to think of media as a combination of conversations and content, we should turn to the investigation of pragmatics in the current generation of social platforms to better understand social online semantics in the future.

Biography: **Dr. David Ayman Shamma** is a research scientist at Yahoo! and is interested in how communities affect the sharing and dissemination of media (including music, images, videos, artworks, and performances). His research focuses on understanding creativity as well as building new creative models and tools. Using models of creativity from his research, Ayman builds tools for new media sharing experiences that are rooted in conversational semantics. He also creates media art installations that have been reviewed by The New York Times, International Herald Tribune, and Chicago Magazine and exhibited internationally, including Second City Chicago, SIGGRAPH ETECH, Chicago Improv Festival, Wired NextFest and NextMusic. Ayman holds a B.S. and a M.S. from the Institute for Human and Machine Cognition at The Univ. of West Florida and a Ph.D. in Computer Science from the Intelligent Information Laboratory at Northwestern Univ. Prior to receiving his Ph.D., he was a visiting research scientist at NASA.

Panel Statement: Dorée Duncan Seligmann

Soon social networks will become truly communication enabled, as communications solutions become more intelligent, starting a shift away from just content to putting context, communications, and communications data at the core of on-line interactions. Communications will be fully integrated and unified with social software, and contextual communication data across media will be shared and analyzed to drive a new user experience. This will change the way we connect, interact, share, and find each other and transform the communications user experience we are familiar with today into a socially aware, context based one.

Imagine a search on a keyword that returns a list of items ranked by communicative or contextual relevance as opposed to content and large scale popularity. The ranking could consider if the information or the interaction sought is best from a certain source (a person's whose opinion is respected by the searcher, or a person with whom there is a history of successful interactions) – through a particular medium (that is more accessible, comprehensible to that searcher), in a particular context (from a particular forum or news site). Such a search could return: people available to chat on that subject now, a list of blogs written by people whom you have valued before on that subject, or product ratings from people with like interests and backgrounds, it could set up a forum from a group of people on-line. Such a search would not return a list of content, but rather content vehicles, the people, devices, media, modalities that are most valuable to you and at the same time could establish communications directly. These rankings could be accessed directly by users, but more importantly would drive the processes that automate and manage communications.

Communications in social software often seems like an afterthought, when indeed it is the core of the user experience to connect with, share, meet, and interact with each other. We often lose the context of the a social network to engage in realtime communications using separate communications channels; and rarely is presence and context information shared across the social network and communications systems. For example, a user's presence in a virtual world is not shared with her presence on a cellphone network; her ratings and comments about products on a website are not part of her customer profile when interacting with a contact center.

Biography: **Dr. Dorée Duncan Seligmann** is the director of Collaborative Applications Research at Avaya Labs. Her work encompasses social software, communication-enabling businesses processes, context-aware applications, presence-based technologies, mobile communication solutions, communications middleware, user-interface techniques and speech-based systems. She holds 12 patents and, since joining Avaya, has filed over 50 patents ranging in topics from informative ringbacks to intelligent context-based systems. Dorée was a Distinguished Member of the Technical Staff at Bell Laboratories. Dorée has received an A.B. in anthropology from Harvard. She has earned a Ph.D. in Computer Science from Columbia University. She is associative editor in chief for *IEEE MultiMedia*.