

# Social Image Research in the Age of Selfies

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**Abstract.** Capturing and sharing images of ourselves and others has given rise to many applications and much human-computer interaction research. Social media has made it faster and easier than ever to share such photos, with “selfies”, or photographs taken of oneself, invading popular culture. In this workshop, we will bring together researchers studying images of people in the context of HCI, whether thru mining such data, analyzing its use, or creating novel UIs for such.

**Keywords:** Selfies · Faces · Social media · Face detection · Self-representation

## 1 Introduction

The desire to capture photographs of ourselves and others is not new, and many applications have arisen to support this desire; with HCI researchers studying these from photobooths [6] to mobile photoware [1]. Social media has made it faster and easier than ever to share such images. In particular, “selfies” or photographs taken of oneself, have invaded popular culture. Instagram accounts are filled with them [4], U.S. courts have ruled on the ownership of a monkey selfie<sup>1</sup>, and the word “selfie” was added to the Oxford English dictionary in 2013, becoming their word of the year.

The abundance of these photos, shared on social media platforms, has facilitated HCI research across a number of disciplines. For example, social scientists have studied cultural differences [8] as well as personality and interaction style recognition [3] through social media profile pictures. They have also shown that photos containing human faces are particularly engaging on these sites, being 38 % more likely to receive likes and 32 % more likely to receive comments on Instagram [2]. Others working in face detection and recognition have taken to mining social media sites for this rich source of data. Facebook itself, with their DeepFace system, has used this data shared on their site to achieve face recognition accuracy beating the current state of the art by more than 27 %.<sup>2</sup> Still other researchers have focused on tools to help users pose for better selfies [7] and interactions to trigger the photos [5].

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<sup>1</sup> <http://www.cnn.com/2014/08/08/opinion/cevallos-monkey-selfie-copyright/>.

<sup>2</sup> <https://research.facebook.com/publications/480567225376225/deepface-closing-the-gap-to-human-level-performance-in-face-verification>.

## 2 Goals, Themes, and Target Audience

The current popularity of the “selfie” phenomenon, vast amounts of photos of people shared on social media sites, complex issues around presentation of self, ethics and privacy, along with the breadth of applicability in HCI research warrants further discussion. The goal of this workshop is to create a forum for exchange and learning by bringing together researchers from a variety of disciplines, across industry and academia, who study images of people in the context of HCI and social media. As such, we encourage submissions from a variety of areas, including **data science and image processing** (such as mining or creating datasets of faces from social media sites or quantitative analysis of these), **social science** (such as studying benefits, challenges, and perception of such photos on social media sites), **information systems** (such as studying the business impact and use of selfies in an organizational context), and **novel applications and interfaces** (such as novel interfaces, interactions or hardware for taking pictures of people and using faces in interface design or applications).

## 3 Organizers

The workshop organizers represent both academia (**Sven Laumer, Assistant Professor, University of Bamberg**) and industry (**Casey Dugan, IBM Research**). They have a history of studying the use of social media (Facebook, Twitter) and enterprise social networks. In 2014, they deployed kiosks for taking selfies at IBM locations around the world. Their research, as well as the increasing attention being paid to “selfies” in popular culture, has inspired them to bring together researchers from across disciplines to exchange ideas. They have organized workshops at ICWSM’13, RecSys’09 & ’10, served on numerous HCI/IS program committees, and co-edited journals.

## References

1. Ames, M., Eckles, D., Naaman, M., Spasojevic, M., House, N.: Requirements for mobile photoware. In: *Personal and Ubiquitous Computing*, vol. 14, no. 2, pp. 95–109. Springer, Heidelberg (2010)
2. Bakhshi, S., Shamma, D.A., Gilbert, E.: Faces engage us: photos with faces attract more likes and comments on Instagram. In: *Proceedings of CHI 2014*, pp. 965–974. ACM (2014)
3. Celli, F., Bruni, E., Lepri, B.: Automatic personality and interaction style recognition from Facebook profile pictures. In: *Proceedings of MM 2014*, pp. 1101–1104. ACM (2014)
4. Hu, Y., Manikonda, L., Kambhampati, S.: What we Instagram: a first analysis of Instagram photo content and user types. In: *Proceedings of ICWSM 2014* (2014)
5. Jain, A., Maguluri, S., Shukla, P., Vijay, P., Sorathia, K.: Exploring tangible interactions for capturing self photographs. In: *Proceedings of the India HCI 2014*, p. 116. ACM (2014)
6. Salomon, G.B.: Designing casual-user hypertext: the CHI 1989 InfoBooth. In: *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, pp. 451–458 (1990)
7. Yeh, M., Lin, H.: Virtual portraitist: aesthetic evaluation of selfies based on angle. In: *Proceedings of MM 2014*, pp. 221–224. ACM (2014)
8. Zhao, C., Jiang, G.: Cultural differences on visual self-presentation through social networking site profile images. In: *Proceedings of CHI 2011*, pp. 1129–1132. ACM (2011)