

# KEYNOTE TALK

Tuesday, October 6, 2020 at 9:00am

## The Shape of Art History in the Eyes of the Machine

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**Abstract:** In this talk, I will present results of research activities at the Art and Artificial Intelligence Laboratory at Rutgers University. We investigate perceptual and cognitive tasks related to human creativity in visual art. In particular, we study problems related to art styles, influence, and the quantification of creativity. We develop computational models that aim at providing answers to questions about what characterizes the sequence and evolution of changes in style over time. The talk will cover advances in automated prediction of style, how that relates to art history methodology, and what that tells us about how the machine sees art history. The talk will also delve into our recent research on quantifying creativity in art in regards to its novelty and influence, as well as computational models that simulate the art-producing system.



**Speaker Bio-Sketch:** Dr. Ahmed Elgammal is a professor at the Department of Computer Science, Rutgers University. He is the founder and director of the Art and Artificial Intelligence Laboratory at Rutgers, which focuses on data science in the domain of digital humanities. He is also an Executive Council Faculty at Rutgers University Center for Cognitive Science. Prof. Elgammal has published over 180 peer-reviewed papers, book chapters, and books in the fields of computer vision, machine learning and digital humanities. He is a senior member of the Institute of Electrical and Electronics Engineers (IEEE). He received several National Science Foundation research grants, including the CAREER Award in 2006. Dr. Elgammal research on knowledge discovery in art history received worldwide media attention, including many reports on the Washington Post, New York Times, Boston Globe, NBC News, the Daily Telegraph, Science News, and others. In 2016 a TV short documentary produced for PBS about his research received an Emmy Award. Dr. Elgammal received his M.Sc. and Ph.D. degrees in computer science from the University of Maryland, College Park, in 2000 and 2002, respectively.