Abstract:
Representing and analyzing the human face is the unifying focus of the Countenance Lab at Clemson University, but this requires many disciplines and areas of active research. Moving forward in the lab’s development, one of the main goals is to develop a facility for advanced acquisition of faces to enable ongoing research and also develop digital-production capabilities. Capturing the likeness of a face requires consideration of topics such as geometry, skin-light interaction, and the manner in which faces move. With this in mind, work in progress at the lab involves photogrammetry, material capture, automated facial landmarking, polygonal re-topology, character rigging, and hardware and software development. The presentation includes a survey of ongoing work in some of these areas with a discussion of the system for facial acquisition that is being designed and built in the lab. If you have seen the sign “Hug a Geodesic Dome” and wondered about the large polygonal dome that was constructed downstairs in McAdams Hall and now moved up to the new Visual Computing Lab on the third floor, now is your chance to come and hear more about it! Questions and ideas are welcome!

Bio:
Eric Patterson, Ph.D. currently serves as Associate Director of Digital Production Arts and Associate Professor in Visual Computing within the School of Computing at Clemson University. He was previously Professor of Computer Science and Digital-Arts Coordinator at University of North Carolina Wilmington where he also worked with the departments of Film Studies and Studio Art to establish a thriving, interdisciplinary Digital-Arts program. Eric has also been part of the Technical-Art team at Red Storm | Ubisoft, an IPAX Faculty Fellow at Sony Pictures Imageworks; a development consultant for Digieffects and others; and worked on a variety of film productions and photography projects.