

## NASA Fellowship in the History of Space Technology 2018

**Rebecca A. Perry**, *University of Virginia Department of Engineering and Society*

The winner of the 2018 SHOT-NASA Fellowship is Dr. Rebecca A. Perry, currently serving as a research associate at the Smithsonian National Air & Space Museum as well as the University of Virginia Department of Engineering and Society. Perry was awarded this fellowship for her proposed book project *Filming the Future: Planetary Voyages and Computer Graphics at NASA/JPL* (Jet Propulsion Laboratory). Perry's expertise in science journalism as both a visual journalist and graphics editor, combined with her PhD in History, Anthropology and Science, Technology & Society from MIT render her uniquely poised for this study. In this book project, Perry will explore the introduction of a new field of image-making to JPL, the work necessary to describe and understand these new images, and the professional communities affected by turning the computer's gaze into space. By creating images and animated films of JPL's Voyager missions, a small team of computer researchers, engineers, and artists advanced the field of CG. Collaborating with image processing specialists, they collectively pushed the limits of computer hardware, developing new devices and techniques intended to meet the needs of scientific communities. A new field of subject matter experts emerged with a stake in determining what constituted scientific data and what was a derivation— including composites, image mosaics, computer-assembled mosaics, and computer graphic images. Who determined what constituted acceptable image manipulation? How did “seeing with CG” compare with other sensors and imaging technologies? These novel instruments of visualization enabled a new style of late-seventies public outreach dubbed “instant science” and “science by press conference.” At the same time, Perry contends that ideas and images from JPL's Computer Graphics Laboratory team disseminated into local professional networks of computer animators, writers, and film directors in nearby 1970s and 80s Hollywood. Thus, Perry's project will undoubtedly contribute to contemporary literature that aims to more clearly articulate the interplay between NASA and broader society, both in terms scientific outreach as well as NASA-private sector relations.