



## Brett Shoelson, PhD

### Principal Application Engineer

*From Pixels to Models: An Introduction to Image Analysis with MATLAB*

Brett holds a B.A. degree in anthropology from the University of Florida, a B.S. in biomedical engineering from Mercer University (Macon, GA), and an M.S. and Ph.D. in biomedical engineering from Tulane University. Brett owned and operated a publishing company before returning to school for a second round of education focusing on engineering. Following his doctoral work, he did post-doctoral research at Harvard Medical School, and was a fellow at the National Institutes of Health for five years. The 13 years prior to his employment at The MathWorks were spent focused on process automation with MATLAB in the biomedical arena. Currently, Brett is a Principal Engineer at MathWorks, and focuses on image and vision processing, and on machine and deep learning.

**Abstract:** Analyzing images efficiently requires selecting the best approach for the job. Some challenges are best solved with pixel-based analyses; some are best solved using features; and others necessitate aggregating information from multiple images in machine- and deep-learning workflows. In this overview session, we will discuss how your image analysis requirements inform the tools you should consider bringing to bear.