

R.I.T.

Chester F. Carlson

College of Science

Center for **IMAGING** SCIENCE

Seminar Series

**Zen and the Art of Image Science:
Musings on the Measurement and
Meaning of Image Quality**

Larry Scarff

*Director, Imaging Science
Flextronics*

4pm, Wed, March 28, 2007

Auditorium of the Center for Imaging Science



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Abstract

This talk will explore the variety of measurements (past and present) that attempt to quantify the various aspects of image quality in different fields (reconnaissance, radiology, graphic arts, photography, digital imaging). We'll compare some of the differences and similarities of task-based vs. perception-based quality metrics, and explore some personal thoughts and views about this ultimate quest for the holy grail of an overall quality specification.

Speaker Bio

Larry has been optimizing and quantifying the quality of imaging systems for over 25 years. He completed his BS/MS in Photographic Science at RIT in 1981, where he taught courses in Photographic Optics, Sensitometry, and Radiometry in the Photoscience department between 1978 and 1981. After completing his degree, he joined Itek Optical Systems, working on optimizing image quality for advanced reconnaissance systems for a variety of airborne and spaceborne systems. In 1991 Larry joined the Polaroid Corporation and contributed to the development of a high-resolution medical imaging printer, through the design, measurement and optimization of the image quality based on requirements for diagnostic radiology, especially focusing on screening mammography quality requirements.

Larry established his own company, Digital Imaging Solutions, in 1997, providing advanced imaging system expertise to the aerospace, radiographic, and professional imaging markets. His clients include Raytheon, Goodrich Aerospace, Agfa Medical Systems, Fischer Imaging, Kodak/Applied Science Fiction, IDX, Flextronics, and others. Successful collaborations include the optimization of mammographic presentation and display algorithms, multispectral and dual-band reconnaissance imaging characterizations, and hardcopy/softcopy image optimizations for a cardiology workstation.

In February 2005, Larry joined Flextronics as the Director of Imaging Science where he manages a team of image scientists providing image quality support for mobile camera module development (e.g., cellular phone cameras), including performance metric definition, test methodology and image quality optimization.