

MAE Seminar Series

Control of Color Imaging Systems

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Abstract

Digital color printing technology offers many new avenues and opportunities for printing color pages on demand at high speed and lower run cost. Many of them are based on electrophotographic technology, similar to the process used in laser printing. In this presentation we describe the fundamental process. The quality and productivity issues of these devices are addressed using variety of new technologies including optical sensing, imaging and closed loop feedback controls. We show how we achieved the offset-look and feel in these devices using advanced sensing and controls; State feedback, LQR, MPC, and Cooperative Controls.

Bio

Dr. Lalit K. Mestha is a Principal Scientist and Project Leader at Xerox Research Center Webster since 1994 where he holds responsibility for creating new color technologies for Production and Office printing systems. Prior to joining Xerox he spent over 6 years in high energy physics Laboratories. Dr Mestha has been prolific in translating control theory to industrial systems which has produced substantive results with demonstrated impact to the society at large. His complex controls technologies to very large scale high energy particle accelerator systems in Rutherford Appleton Laboratory and Fermi National Accelerator Laboratory has given rise to many discoveries about the fundamental nature of matter, energy, space, and time and has been adopted by CERN in Switzerland and KEK in Japan.

110 Knox Hall

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3:30 pm – 4:30 pm

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