

**University of Rochester
Department of Electrical and Computer Engineering
Colloquia Series**

Non-contact Remote Sensing – Anticipated benefits in a cyber physical environment

**Lalit K. Mestha
Principal Scientist
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**Wednesday, November 9th
11:00 AM – 12:00 PM
Computer Studies Building (CSB) 209**

Abstract: We will present details about proposed on-going research in non-contact video-based analysis of human vitals for smart healthcare systems, and collaborative research with Universities. We will highlight the results achieved in estimating heart rate of infants and adults. Describe how controls & system theory can improve the performance of such systems. We will have an interactive question and have a Q&A session about successful collaborative research with Universities and Industries.

Bio: Lalit K. Mestha, a Principal Scientist at Xerox received his PhD from the University of Bath, England in 1985 and his BE in 1982, from the University of Mysore, India, all in EE. He has led variety of research projects since 1987 on sensing and control of small to large scale imaging and engineering systems. Numerous controls, imaging and sensing technologies researched by LK are being deployed in systems (particle accelerators in Fermilab, KEK, CERN) and in imaging products (iGen3, iGen4, iGen4 220, Xerox Color 800/1000, DocuColor 5000, DocuColor 7002/8002, DocuColor 8000 developed and marketed by Xerox), generating revenue in excess of 3.0 billion \$. An inline low cost spectrophotometer sensor researched by Mestha is manufactured by The Appcon Group, Inc., Rochester, NY. He is very active in increasing the knowledge of system science in imaging and systems community as an outreach to advance and apply controls to the corporate and university environment. He does this through (1) publications; 240+, which includes 196 patent filings of which 109 patents have been awarded (with 87 pending), (2) initiating and working on collaborative projects with universities, (3) serving in National and Societal activities (NSF, IEEE CSS, ASME, IS&T), and (3) teaching over 24+ graduate courses as professor since 1990 at the UT Arlington and the Rochester Institute of Technology. He is a recipient of 2010 Anne Mulcahy Inventor Award for contributions to color accuracy in Xerox production printing devices and 2006 IEEE Control System Technology Award. Recently published a book “Control of color imaging systems”, ISBN: 978-0-8493-3746-8, by CRC Press and wrote a book chapter in “The Control Handbook, Second Edition (three volume set)”; ISBN 978-1-4200-7366-9. Prior to joining Xerox, Mestha was at the SSC Laboratory in Dallas. He is a Fellow of IEEE, Certified Black Belt and teaches at RIT as an Adjunct Professor in his spare time.

Light refreshments will be provided.