

**UNIVERSITY OF HYDERABAD**  
**School of Computer and Information Sciences**

**Seminar Notice**

**Speaker:** Prof. P. Nagabhushan,  
Director,  
Indian Institute of Information Technology,  
Allahabad, India.

**Title:** Lines scan signals and entropy computations for Establishing Document Equivalence (without using OCR)

**Date:** 23<sup>rd</sup> February 2018

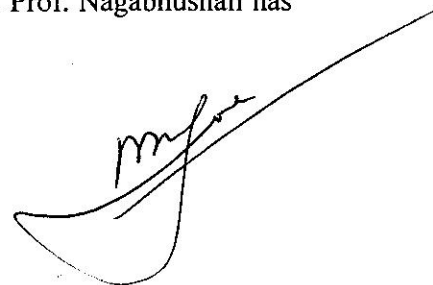
**Time:** 03:30 P. M.

**Venue:** Seminar Hall, SCIS.

**Abstract:** There are many requirements in document image analysis, which warrant understanding the equivalence of document images if possible without OCRing the text contents and in some cases OCRs do not exist. In this talk we propose to employ the line scan signal based entropy notion to 'feel' the text content in a document image without actually reading it, and hence establish the equivalence or otherwise of two corresponding text components (line/word/character). We introduce Conventional Entropy Quantifier (CEQ) and also define Modified Entropy Quantifier (MEQ) to measure the energy content in the components. The results of experiments performed at line, word and character level are reported. These initial steps in the sequel are expected to establish the equivalence between the two text document images.

**Biography:** Dr. P. Nagabhushan, Director, Indian Institute of Information Technology, Allahabad is Professor in Computer Science and Engineering, University of Mysore, Mysore. He has more than three and half decades of teaching. Prior to joining IITA as Director, he has served several administrative positions such as Chief Nodal Officer, Choice Based Credit Pattern Continuous Assessment Education System, University of Mysore; Director, Planning, Monitoring and Evaluation Board; Dean, Faculty of Science and Technology; Director, Center for Information Science and Technology at University of Mysore, Mysore, India. He was also distinguished Professor and Chairman at Amrita Vishwavidyapeetam, Amrita University, Coimbatore; Director, Bangalore Educational Society for Technology Advancement and Research and Principal, Bangalore Technological Institute, Bangalore. He is actively associated with various academic, statutory and professional bodies. He is the member of academic councils and Board of studies of several universities. He has been serving as an active member in Technical Advisory committee at Indian Statistical Institute, Kolkata, School Board member of Central University of Hyderabad and Academic council member of Islamic University of Science and Technology, Awantipora, Jammu & Kashmir. He is also visiting Professor and acting as subject expert in many Universities and Institutes. There are various high profile committees of AICTE, UGC, DST, PSC, NBA, ISRO, DRDO, RECs (now NITs) where Prof. Nagabhushan was an active member. Prof. Nagabhushan has worked as Investigator in several major funded projects.

*N. Nagabhushan*  
22/2/18



He has also rendered his services in a number of foreign Institutions such as invited Professor at University of Dauphine, Paris, France; Visiting Professor, Tokyo Denki University, Japan; Exchange Professor, Saginaw Valley State University, USA; Visiting Scientist, INRIA, Rocquencourt, France; Invited Expert, Michigan State University, USA; Invited Expert for assessing programs of Computer Science and Technology, University of Medical Sciences and Technology, Sudan; Team member of Bilateral Indo-Russia Workshop, University of Moscow, Russia. He is Fellow of Institution of Electronics and Telecommunication Engineering and Fellow of Institution of Engineers. He is a fellow of International Academy of Physical Sciences. He was offered the prestigious Visiting Professorship award of ISTE. He is also awarded ICCR 2008 Outstanding Academician and Researcher- Award in appreciation of life time contribution to the field of Computer Science and Engineering; ICICOT 07 Outstanding Academician Award; IEEE- ICSIP- 06 Award in appreciation of life time contribution to the field of Signal and Image Processing. Recently he has been awarded Lifetime Achievement Award-RTIP2R- 2016 for Outstanding Achievement, Global Leadership and Dedicated Service to the field of Image Processing and Pattern Recognition.

On academic front, he has successfully guided 28 numbers of PhDs, and has authored more than 500 numbers of Research Papers out of which more than 100 papers are DBLP indexed. The citation index of 1944 with H-index of 21 and i10 index of 58 reflects his academic accomplishments.

*A. Ganesan*  
20/2/18  
Seminar In-Charge

*M. S. R.*  
DEAN, SCIS  
20/2/18