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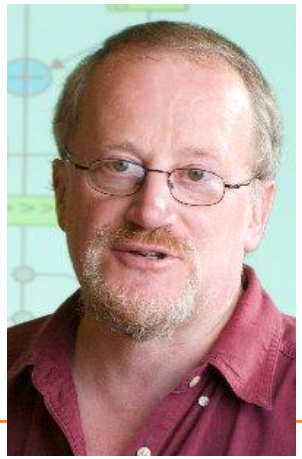
In Memory of

Smt. Rukmini

Shri Gopalakrishnachar

Instituted in 2008 on the eve of the IISc Centenary celebrations in 2009

Offered to celebrated researchers in Computer Science and related areas to visit IISc for research interactions and collaborations for extended visits



Prof. Ross John Anderson

Personal Chair in Security Engineering,

Computer Laboratory,

University of Cambridge,

London, United Kingdom

Ross Anderson (born 15 September 1956) is Professor of Security Engineering at the Department of Computer Science and Technology, University of Cambridge where he is part of the University's security group. Anderson's research interests are in security, cryptology, dependability and technology policy. He has made path breaking contributions in these areas. Anderson has always campaigned for computer security to be studied in a wider social context. Many of his writings emphasise the human, social, and political dimension of security.

Ross Anderson was elected a Fellow of Royal Society in 2009. His FRS Citation reads: "Ross Anderson is a pioneer and world leader in security engineering, and is distinguished for starting a number of new areas of research in hardware, software and systems. His early work on how systems fail established a base of empirical evidence for building threat models for a wide range of applications from banking to healthcare. He has made trailblazing contributions that helped establish a number of new research topics, including security usability, hardware tamper-resistance, information hiding, and the analysis of application programming interfaces. He is also one of the founders of the study of information security economics, which not only illuminates where the most effective attacks and defences may be found, but is also of fundamental importance to making policy for the information society."

Ross Anderson visited IISc for a month during 2012. He inspired a number of faculty members and research students with interactive discussions and delivered a highly popular Institute level lecture. He was hosted by Prof. N. Balakrishnan from the Supercomputer Education and Research Centre.

Prof. Jaime Carbonell

(29 July 1953 - 28 February 2020)

Carnegie Mellon University

Director, Language Technologies Institute

University Professor, Allen Newell Professor, School of Computer Science

Jaime Guillermo Carbonell (July 29, 1953 – February 28, 2020) was a computer scientist who made seminal contributions to the development of natural language processing tools and technologies. His extensive research in machine translation resulted in the development of several state-of-the-art language translation and artificial intelligence systems. He earned his B.S. degrees in Physics and in Mathematics from MIT in 1975 and did his Ph.D. under Dr. Roger Schank at Yale University in 1979. He joined Carnegie Mellon University as an assistant professor of computer science in 1979.

His interests spanned several areas of artificial intelligence, language technologies and machine learning. In particular, his research focused on areas such as text mining (extraction, categorization, novelty detection) and in new theoretical frameworks such as a unified utility-based theory bridging information retrieval, summarization, free-text question-answering and related tasks. He also worked on machine translation, both high-accuracy knowledge-based MT and machine learning for corpus-based MT (such as generalized example-based MT). He was a Fellow of AAAI.

Jaime Carbonell visited IISc for a month during 2012. He was a bundle of energy and engaged in a lively manner with a number of faculty members and research students with interactive discussions and delivered a highly popular Institute level lecture. He was hosted by Prof. N. Balakrishnan from the Supercomputer Education and Research Centre.

Prof. Michael Norman

University of California San Diego

Director,
San Diego Supercomputer Center

Professor,
Department of Physics

Michael L. Norman was appointed San Diego Supercomputing Center (SDSC) director in September 2010. He is a distinguished professor of physics at UC San Diego and a globally recognized astrophysicist. Dr. Norman is a pioneer in using advanced computational methods to explore the universe and its beginnings. In this capacity, he has directed the Laboratory for Computational Astrophysics -- a collaborative effort between UC San Diego and SDSC resulting in the Enzo community code for astrophysics and cosmology in use worldwide.

Norman's work has earned him numerous honors, including Germany's prestigious Alexander von Humboldt Research Prize, the IEEE Sidney Fernbach Award, and several HPCC Challenge Awards. He also is a Fellow of the American Academy of Arts and Sciences, and the American Physical Society. He holds an M.S. and Ph.D. in engineering and applied sciences from UC Davis, and in 1984 completed his post-doctoral work at the Max Planck Institute for Astrophysics in Garching, Germany.

Norman visited IISc for two weeks during June-July 2016. He delivered an Institute Lecture on June 29, 2016 entitled *Discovering the First Stars and Galaxies in a Supercomputer.* A number of faculty members from Physics, CSA, and SERC interacted with him during his visit. He was hosted by Prof. R. Govindarajan, CSA and SERC.

Prof. Rakesh Agrawal

President and
Founder, Data Insights
Laboratories, USA.

Former Distinguished
Scientist, IBM and
Microsoft Research

Rakesh Agrawal is the President and Founder of the Data Insights Laboratories. He is a member of the U.S. as well as the Indian National Academy of Engineering, a Fellow of ACM, and a Fellow of IEEE. He has been both an IBM Fellow and a Microsoft Fellow. ACM SIGKDD awarded him its inaugural Innovations Award and ACM SIGMOD the Edgar F. Codd Award. He was named to the Scientific American's First list of top 50 Scientists. Rakesh has been granted 80+ patents and published 200+ papers, including the 1st and 2nd highest cited in databases and data mining. Four of his papers have received "test-of-time" awards.

His research formed the nucleus of IBM Intelligent Miner that led the creation of data mining as a new software category. Besides Intelligent Miner, several other commercial products incorporate his work, including IBM DB2 and WebSphere and Microsoft Bing.

He is widely regarded as the father of data mining. His papers have accumulated a staggering 126000+ citations with the top two cited papers having citations of 26000+ and 22000+. He has a h-index of 108.

Rakesh Agrawal visited IISc for a month during September 2017 and again visited for one and half months during January-February 2018. He delivered the prestigious Prof. I.G. Sarma Memorial lecture on Data Driven Education on September 18, 2017. In addition, he inspired the faculty members and Ph.D. students with interactive discussions and lectures. He was hosted by Prof. M. Narasimha Murty and Prof. Jayant Haritsa, Department of CSA.

Prof. Sargur Srihari

(SUNY, Buffalo, NY, USA)

SUNY Distinguished
University Professor
Department of
Computer Science &
Engineering, SUNY

Sargur Srihari is a computer scientist whose work is on automated systems for pattern recognition and machine learning. The principal impact of his work has been on statistical methods, on the analysis and recognition of handwriting and in computational methods for forensic impression evidence. Sargur Srihari is currently a SUNY Distinguished Professor in the Department of Computer Science and Engineering at the University at Buffalo, He teaches courses in machine learning and probabilistic graphical models.

With support from the United States Postal Service for over 20 years, he founded CEDAR, the Center of Excellence for Document Analysis and Recognition, in 1991, which had a major impact. Srihari's honors include: Outstanding Acheivements Award of IAPR/ICDAR in Beijing China in 2011, Distinguished alumnus of the Ohio State University College of Engineering in 1999. Fellow of the International Association for Pattern Recognition in 1996, Life Fellow of the IEEE.

Sargur Srihari visited IISc for two months during June-July 2018. He delivered a series of highly popular lectures on deep learning. He delivered an Institute lecture entitled Artificial Intelligence and Deep learning On July 17, 2018. He was hosted by Prof. M. Narasimha Murty, Department of CSA. Srihari again visited IISc during January - July 2020 as Professor Satish Dhawan Chair Professor and offered a highly popular course on Deep Learning.

Prof. Babak Falsafi

(EPFL, Lausanne)

Professor, Computer and Communication Sciences, EPFL

Founder Director, EcoCloud Research Centre

Babak Falsafi is a Professor in the School of Computer and Communication Sciences and the founding director of the EcoCloud, an industrial/academic consortium at EPFL investigating scalable data-centric technologies. He has made numerous contributions to computer system design and evaluation including a scalable multiprocessor architecture which was prototyped by Sun Microsystems (now Oracle), snoop filters and memory streaming technologies that are incorporated into IBM BlueGene/P and Q and ARM cores, and computer system performance evaluation methodologies that have been in use by AMD, HP and Google PerKit . He has shown that hardware memory consistency models are neither necessary (in the 90's) nor sufficient (a decade later) to achieve high performance in multiprocessor systems. These results eventually led to fence speculation in modern microprocessors. His latest work on workload-optimized server processors laid the foundation for the first generation of Cavium ARM server CPUs, ThunderX. He is a recipient of an NSF CAREER award, IBM Faculty Partnership Awards, and an Alfred P. Sloan Research Fellowship. He is a fellow of IEEE and ACM.

Babak Falsafi visited IISc for two weeks during June-July 2019. He delivered an Institute lecture entitled *Silicon Heterogeneity in the Cloud* on July 9, 2019. He also delivered a series of lectures which were received well. He was hosted by Dr. Arkaprava Basu and Prof. Vinod Ganapathy, Department of CSA.

Prof. Pavol Hell

(Simon Fraser Univ.)

Professor of
Computing Science,
The Simon Fraser
University, Canada

Pavol Hell is a Professor of Computing Science at Simon Fraser University (SFU), Burnaby, Canada. He received his PhD from the Université de Montreal in 1973, under the supervision of Gert Sabidussi. Prior to joining SFU, Hell was with Rutgers University in New Brunswick, New Jersey. He is a Visiting Professor at Charles University in Prague and has held other visiting positions at a number of universities in Brazil, France, Italy, and the Czech Republic. He is a managing editor of the *Journal of Graph Theory,* and a SIAM Fellow, class of 2012. His research interests focus on algorithmic graph theory and combinatorics.

Pavol Hell is the author of the famous book *Graph and Homomorphisms* and many highly cited papers. He is considered as one of the World's foremost scholars in algorithmic graph theory.

Pavol Hell visited IISc for a month during November-December 2019. He delivered on December 6, 2019, a CSA Golden Jubilee Frontier Lecture entitled *A Graph-Theorist's Perspective on the Quest for Dichotomy.* He also gave several other popular talks and interacted with a number of faculty members and Ph.D. students. He was hosted by Prof. Sunil Chandran, Department of CSA.

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