**Big Picture** Seminar Series Invitation

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ENGINEERS AUSTRALIA

# Prof Sanjit K. Mitra

## Digital Signal Processing: Road to the Future

**Abstract** The field of digital signal processing (DSP) has been a very active area of research and application for more than 4 decades. This broad development has paralleled in time the rapid development of high-speed electronic digital computers, microelectronics, and integrated circuit fabrication technologies. An ever-increasing assortment of integrated circuits specifically tailored to perform common DSP functions is available to the design engineer as system building blocks or parts-in-trade. DSP methodologies have been applied to consumer electronics, communications, automotive electronics, instrumentation, medical electronics, tomography and acoustic imaging, cartography, seismology, speech recognition, robotics etc. In this talk we first provide a brief overview of the initial developments in DSP, followed by a review of some of the important advances made during almost fifty year period of its growth, and describe a number of key applications. We conclude with a speculation on the future trends and directions

**Biography** Professor Sanjit K. Mitra is currently appointed as the Stephen and Etta Verra Professor of the Ming Hsieh Department of Electrical Engineering at the University of Southern California. His research interests include digital signal, image and video processing, data compression, image and video enhancement, image analysis and mixed analog-digital signal processing.

**VRL Big Picture Seminar Information** http://www.nicta.com.au/nicta_events/big_picture

**Date**
Thursday 8th September

**Agenda**
5pm – 6pm Light Refreshments
6pm – 7pm Seminar

**Venue**
Brown Lecture Theatre, Lvl 1, Bldg 193 (Dept. of Electrical & Electronic Engineering), The University of Melbourne

**RSVP**
Bookings are essential. Please email katya.baxter@nicta.com.au
**by Friday 3rd September 2011**