

IEEE SCV Signal Processing Society

Date: May 8th 2006
Title: New Directions in Home Theater Systems
Speaker: Victor Ramamoorthy, PhD, Infinite Algorithms

Location: National Semiconductor Credit Union Building (Building 31), 955 Kifer Rd., Sunnyvale (Near the intersection of Lawrence and Central Expressway);

Coordinates: N37deg 22.464' W122deg 00.272' (WGS84);

http://maps.yahoo.com/maps_result?ed=Lz2FO.p_0TpVKFWBuA124OfTr9dn&csz=Sunnyvale%2C+CA&country=us

Directions: Take 101 to Lawrence Expressway. Head south on Lawrence to Kifer (past Central). Turn right on Kifer. Go 0.5 miles on Kifer and turn right into the Credit Union parking lot. Entrance is on the back side of the building.

Time: 6:30pm: Fast Food & drinks (\$1 Donation Recommended towards Refreshments)
7:00pm: Announcement
7:05pm: Talks starts

Abstract:

We are currently on the verge of stepping into exciting new possibilities in home entertainment systems. New insights into human perceptual systems have resulted in improved designs that can approach our perceptual limits of satisfaction without overload and stress. Fueled by developments in imaging, display, video, audio, and radio technologies, entirely new entertainment designs are emerging. In this talk, we will explore these trends and technologies that support them: Wavelet decomposition ideas have led to very high quality compression designs supporting Digital Cinema. Wave Field Synthesis is driving high definition spatial audio rendering systems. UWB radio technologies promise high data rates in short distances eliminating need for cable connections. High dynamic range imaging is transforming camera systems design. The confluence of these advances portends endless opportunities to innovate and build new products for consumers. Some examples will be illustrated.

Biography:

Ramamoorthy, PhD, has over 35 years experience in industry, academia, and management. He has held various senior R&D positions in various Silicon Valley companies as well as in AT&T Bell Labs and SBC. He holds a number of patents in signal processing of audio and video signals. He has published over 50 papers in international professional journals and has organized several conferences. He received 1997 Lucent Patent Award for his work on audio noise filtering. He has also served as advisor to Ph.D. students and has taught courses. He is a member of IEEE and Audio Engineering Society. His consulting company, Infinite Algorithms, is serving Silicon Valley high tech companies in the design of cutting edge entertainment products and in developing new product concepts. He received his Masters degree from IIT, Madras, India and Ph.D. from University of Linkoping, Sweden.