

Speaker: **Javan Erfanian,  
Bell Mobility, Canada  
– IEEE Lecturer**

Title: **Serving The Future Mobile Society –  
Wireless Technology Evolution &  
Key Areas of Research**

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### **Abstract**

This talk outlines the emerging and the future wireless world, and discusses the technology/service evolution in an increasingly converged environment, in the next 2 to 5+ years. It focuses on user-experience, technology/service innovations, global research, industry trends and standardization.

A holistic view in time (roadmap, evolution, vision of the future) and space (building blocks, convergence/co-existence) is outlined. This includes an end-to-end understanding of how each of the building blocks (user interaction, converged open service environment, user device innovations and management, service enablers, core network, and mobile/nomadic access mechanisms) evolves, and how the entire picture serves, in phases, to enable the future mobile society.

The vision of the future towards an increasingly user-centric and seamless access across smart user cyberspaces is presented. This vision also highlights the research dilemma of enabling a “natural communication” mode for the user on the one hand, while having an increasingly complex enabling environment on the other.

An end-to-end perspective on key research topics of the coming years is shared, to encourage focus and collective energy for future research and innovations.

### **Biography**

Javan Erfanian has been involved in telecommunications research and industry for the past 15 years. He did his education at the University of Calgary and the University of Toronto in Canada. His publications are cited in research journals and textbooks, particularly on use of non-linear estimation algorithms for Turbo Codes and future telecommunication systems. His recent contributions to research forums have focused on future service environment and user interaction. In addition to being a speaker, Javan has taught many academic and industry courses and programs, particularly on Communications and Radio Systems at the University of Toronto.

In his IEEE involvement, Javan was Chair of IEEE Communications Society in Toronto in 1995-1999 which brought him two international awards. He was the Canadian correspondent for IEEE Communications Magazine in late 90s. He received the IEEE Millennium Medal in 2000, and has been an IEEE Communications Society Lecturer.

In his professional career, Javan is currently Senior Associate Director - Technology Research & Strategy, at Bell Mobility in Canada. In this role, Javan conducts research and charts technology strategy, while working with the global industry and academia on research, innovations and standards for new technologies and services.