Title: Optical Communication Networks Optimization

Venue: Wednesday, 11:00am, September 20, 2023, at VIC302, Toronto Metropolitan University

Abstract: In recent years, we have been observing fast social and economic development, rapidly changing industry, and continuously growing demand for bandwidth. This development raises new challenging optimization problems for the optical communication networks. These problems are often very complex not only due to the optical network configurations, but also due to their enormous traffic and operation al complexity. To address these challenges, networks must be adaptive to enable service providers and operators to optimize their existing communication network infrastructures while incorporating new technologies and ways of working. There is a need for an effective optimization solution method to improve the OAM&P of the optical communication networks. During this talk, the speaker will conduct a live and real-time connection to the Ciena Optophotonics Lab at Algonquin College (Ottawa Canada) to demonstrate how these optical communication networks work and how they can be adaptive and optimized.

Speaker Bio: Prof. Wahab Almuhtadi has over 32 years of industry experience, and in parallel, over 26 years of university teaching experience. He's Professor/Coordinator of "Optical Systems and Sensors" Program, Algonquin College/Carleton University, Canada. He received several awards from IEEE, academia, and industry, e.g., 2010 IEEE Leadership Award, 2015 IEEE Canada W.R. Service Award, 2009 Laurent Isabelle Teaching Excellence, 2006-NISOD Award, and 2015-Canadian Pacific Railway Engineering Medal, Engineering Institute of Canada-EIC. He's P.Eng. and EIC Fellow. Dr. Almuhtadi earned his M.Sc. and Ph.D. in Electrical Engineering from Brno University of Technology, Czech Republic in 1986 and 1990 respectively. Dr. Almuhtadi served also as the President and the Chair of Board of Governors of IEEE Consumer Technology Society - CTSoc (2019- 2022). He was a very dedicated Member in the IEEE Technical Activities Board-TAB (2019-2022).