

BCWS Seminar Series

Data Dissemination and Routing in Vehicular Ad-Hoc Networks

by

Professor Ivan Stojmenovic

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Time: Wednesday, March 3, 1:30 - 2:30 pm

Place: Room 4356, Mackenzie Building, Carleton University

Abstract: This talk reviews recent vehicle-to-vehicle communication protocols, with the emphasis on protocols addressing intermittent connectivity of vehicular ad hoc networks (VANET). Data dissemination enables congestion notification (among others) and is based on tasks such as diffusion and broadcasting to a region (geocasting), which rely on single-hop and multi-hop inter-vehicle communications, respectively. Vehicle to vehicle routing enables application services for user devices via multi-hopping to roadside units, and direct communication among vehicles. Common issues in VANET routing are discussed.

Biography: Ivan Stojmenovic received Ph.D. degree in mathematics. He held regular and visiting positions in Serbia, Japan, USA, Canada, France, Mexico, Spain, UK (as Chair in Applied Computing at the University of Birmingham), Hong Kong, and Brazil, and is Full Professor at the University of Ottawa, Canada. He published over 250 different papers, and edited four books on wireless, ad hoc and sensor networks and applied algorithms with Wiley/IEEE. He is editor of over dozen journals, editor-in-chief of IEEE Transactions on Parallel and Distributed Systems (from January 2010), and founder and editor-in-chief of three journals (Multiple-Valued Logic and Soft Computing, Parallel, Emergent and Distributed Systems, and Ad Hoc & Sensor Networks). Stojmenovic has h-index 35 and 6000 citations. One of his articles was recognized as the Fast Breaking Paper, for October 2003 (as the only one for all of computer science), by Thomson ISI Essential Science Indicators. He is recipient of the Royal Society Research Merit Award, UK. He is elected to IEEE Fellow status (Communications Society, class 2008), and is recipient of Excellence in Research Award of the University of Ottawa 2008-09. He chaired and/or organized 50 workshops and conferences, and served in over 100 program committees. Among others, he was/is program co/vice-chair at IEEE PIMRC 2008, IEEE AINA-07, IEEE MASS-04&07, EUC-05&08, WONS-05, MSN-05&06, ISPA-05&07, founded workshop series at IEEE MASS, IEEE ICDCS and IEEE DCOSS, and Workshop Chair at IEEE MASS-09, ACM Mobicom/Mobihoc-07 and Mobihoc-08.