

Data Mining and Machine Learning for Analysis of Network Traffic

SPEAKER Prof Ljiljana TRAJKOVIC

Professor
School of Engineering Science
Simon Fraser University
Burnaby, British Columbia
Canada

DATE 27 December 2017 (Wednesday)

TIME 2:00 pm - 3:00 pm

VENUE CS Seminar Room, Y6405
6th Floor, Yellow Zone
Yeung Kin Man Academic Building
City University of Hong Kong
83 Tat Chee Avenue
Kowloon Tong

ABSTRACT

Collection and analysis of data from deployed networks is essential for understanding modern communication networks. Data mining and statistical analysis of network data are often employed to determine traffic loads, analyze patterns of users' behavior, and predict future network traffic while various machine learning techniques proved valuable for predicting anomalous traffic behavior. In described case studies, traffic traces collected from various deployed networks and the Internet are used to characterize and model network traffic, analyze Internet topologies, and classify network anomalies.

BIOGRAPHY

Ljiljana Trajkovic received the Dipl. Ing. degree from University of Pristina, Yugoslavia, in 1974, the M.Sc. degrees in electrical engineering and computer engineering from Syracuse University, Syracuse, NY, in 1979 and 1981, respectively, and the Ph.D. degree in electrical engineering from University of California at Los Angeles, in 1986.

She is currently a Professor in the School of Engineering Science at Simon Fraser University, Burnaby, British Columbia, Canada. From 1995 to 1997, she was a National Science Foundation (NSF) Visiting Professor in the Electrical Engineering and Computer Sciences Department, University of California, Berkeley. She was a Research Scientist at Bell Communications Research, Morristown, NJ, from 1990 to 1997, and a Member of the Technical Staff at AT&T Bell Laboratories, Murray Hill, NJ, from 1988 to 1990. Her research interests include high-performance communication networks, control of communication systems, computer-aided circuit analysis and design, and theory of nonlinear circuits and dynamical systems.

Prof. Trajkovic serves as Junior Past President (2016–2017) of the IEEE Systems, Man, and Cybernetics Society and served as President (2014–2015), President-Elect (2013), Vice President Publications (2012–2013 and 2010–2011), Vice President Long-Range Planning and Finance (2008–2009), and a Member at Large of its Board of Governors (2004–2006). She served as 2007 President of the IEEE Circuits and Systems Society. She was a member of the Board of Governors of the IEEE Circuits and Systems Society (2001–2003 and 2004–2005). She is Chair of the IEEE Circuits and Systems Society joint Chapter of the Vancouver/Victoria Sections. She was Chair of the IEEE Technical Committee on Nonlinear Circuits and Systems (1998). She is General Co-Chair of SMC 2020 and served as General Co-Chair of SMC 2016 and HPSR 2014, Technical Program Co-Chair of ISCAS 2005, and Technical Program Chair and Vice General Co-Chair of ISCAS 2004. She served as an Associate Editor of the IEEE Transactions on Circuits and Systems (Part I) (2004–2005 and 1993–1995), the IEEE Transactions on Circuits and Systems (Part II) (1999–2001 and 2002–2003), and the IEEE Circuits and Systems Magazine (2001–2003). She was a Distinguished Lecturer of the IEEE Circuits and Systems Society (2010–2011 and 2002–2003). She is a Professional Member of IEEE-HKN and a Fellow of the IEEE.

All are welcome!



In case of questions, please contact Prof KWONG Tak Wu Sam at Tel: 3442 2907, E-mail: cssamk@cityu.edu.hk, or visit the CS Departmental Seminar Web at <http://www.cs.cityu.edu.hk/news/seminars/seminars.html>.

