Digitalization in Industry and City Infrastructure

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Abstract: A brief review on the principles of digitalization and its impacts on our day to day life will be presented. Two main areas of digitalization implementation will be focused on. The first will be “Smart Cities” and the digital infrastructure including smart buildings, smart mobility and smart utilities grid, and the utilization of the IOT technology to support the smart cities for the future. The second will be Industries 4.0 and the principles of the digital enterprise for advanced manufacturing applications as well as the process automation applications utilizing the “Digital Twin” principles. Dr. Murad will also touch on the most important factor to ensure successful evolution of digitalization for our future that is the skills requirements and development in that direction.

Bio: Dr. Tom Murad, member of the Professional Engineers Ontario Engineering Order of Honour, is a respected leader, thinker, and distinguished speaker on the topics of Engineering, Technology and Technical talents development and education. Dr. Murad joined Siemens Canada in 2010. He is the founder of the Siemens Canada Engineering and Technology Academy which he has been directing since October 2014. He also serves as a member of various advisory Boards of Directors in industry and academia. Dr. Murad has about 40 years of experience in professional engineering and technical operations executive management including academic and R&D work in electrical power, industrial controls and automation. Dr. Murad holds a Bachelor of Engineering (Electrical & Electronics) and a Doctorate in Power Electronics and Industrial Controls from Loughborough University of Technology in the UK, with a Leadership Program Certificate from the Schulich Business School, York University in Ontario, Canada.

TOP-SET est un programme de formation FONCER du CRSNG en puissance optoélectronique ayant pour but de façonner une cohorte de personnel hautement qualifié détenant des connaissances approfondies en systèmes optoélectroniques pour joindre les rangs d’équipes de recherche et développement.

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