

Low-Power Wide Area for IoT: concepts and hands-on

Dates : 26, 27, and 28th of november 2018
Campus of science and technology (CST)

500 \$ participant (3 days | 18 hours)
The main language of the training : English
Number of participants : 20

For more informations, please contact :
Samer Lahoud : +961-81-718 971
samer.lahoud@usj.edu.lb

Learning outcomes :

- 1) Analyze the energy and transmission constraints of connected objects
- 2) Identify services and applications for LPWAN
- 3) Compare existing LPWAN technologies, namely LoRaWAN and NB-IoT
- 4) Design and assess LPWAN deployments
- 5) Deploy a LoRaWAN end-to-end platform

Target audience : Students, alumni, professionals

Trainer :



Samer Lahoud is an Associate Professor at the Saint-Joseph University of Beirut where he lectures computer networking courses at the Faculty of engineering (ESIB). His research activities focus on routing and resource allocation algorithms for wired and wireless communication networks. He has co-authored more than 80 papers published in international journals and conference proceedings. Mr. Lahoud received the Ph.D. degree in communication networks from Telecom Bretagne, Rennes, in 2006. After his Ph.D. degree, he spent one year at Alcatel-Lucent Bell Labs Europe. From 2007 to 2016, he was with the University of Rennes 1 and with IRISA Rennes as an Associate Professor.



Melhem El Helou received the engineer's degree and master's degree in telecommunications and networking engineering from the Ecole Supérieure d'Ingénieurs de Beyrouth (ESIB), Faculty of Engineering at the Saint Joseph University of Beirut, Beirut, Lebanon, in 2009 and 2010, respectively and the Ph.D. degree in computer and telecommunications engineering from IRISA Research Institute, University of Rennes 1, Rennes, France and Saint Joseph University of Beirut, in 2014. He joined ESIB in September 2013 where he is currently an Assistant Professor (fr: Maître de conférences). His research interests include wireless networks, radio and energy resource management, Internet of Things, and quality of service.



Marc Ibrahim is an Associate Professor and the Director of the computer, modelling and Information Technologies research center at the Faculty of Engineering, Saint Joseph University of Beirut. Marc obtained his engineering degree in telecommunications and networks from the USJ in 2002, then his PhD in computer and networks from the University of Versailles Saint-Quentin en Yvelines, France, in 2009. His teaching activity encompasses telecommunications, computer networks and network modeling. His research work orbits wireless and mobile networks, performance modeling and networks measurement, and IoT. He led the 'Comiqal: collaborative measurement of Internet quality in Lebanon' project that built a neutral platform for measuring the service quality of Internet access of mobile and ADSL users in Lebanon. He is currently coordinating the 'LISA: Long-range IoT for Smart Agriculture' project aiming at designing and building a LoRa IoT pilot network for smart agriculture.