

Conference Program

The Third International Conference on Electrical and Biomedical Engineering, Clean Energy and Green Computing (EBECEGC 2018)

&

The Sixth International Conference on Digital Information, Networking, and Wireless Communications (DINWC 2018)



Faculty of Engineering - Lebanese University Rafic Hariri Campus - Hadath Beirut - Lebanon

April 25-27, 2018

Note: The time of each presentation including questions is 15 minutes. Please adhere to it.

Host Country Lebanon

Participating Countries: Barbados, Canada, China, France, Ghana, Jordan, Kuwait, Lebanon, Saudi Arabia, Turkey, UAE

Partners and Sponsors

Agence Universitaire de la Francophonie, BMO
Lebanon



Ordre des Ingénieurs et des Architectes

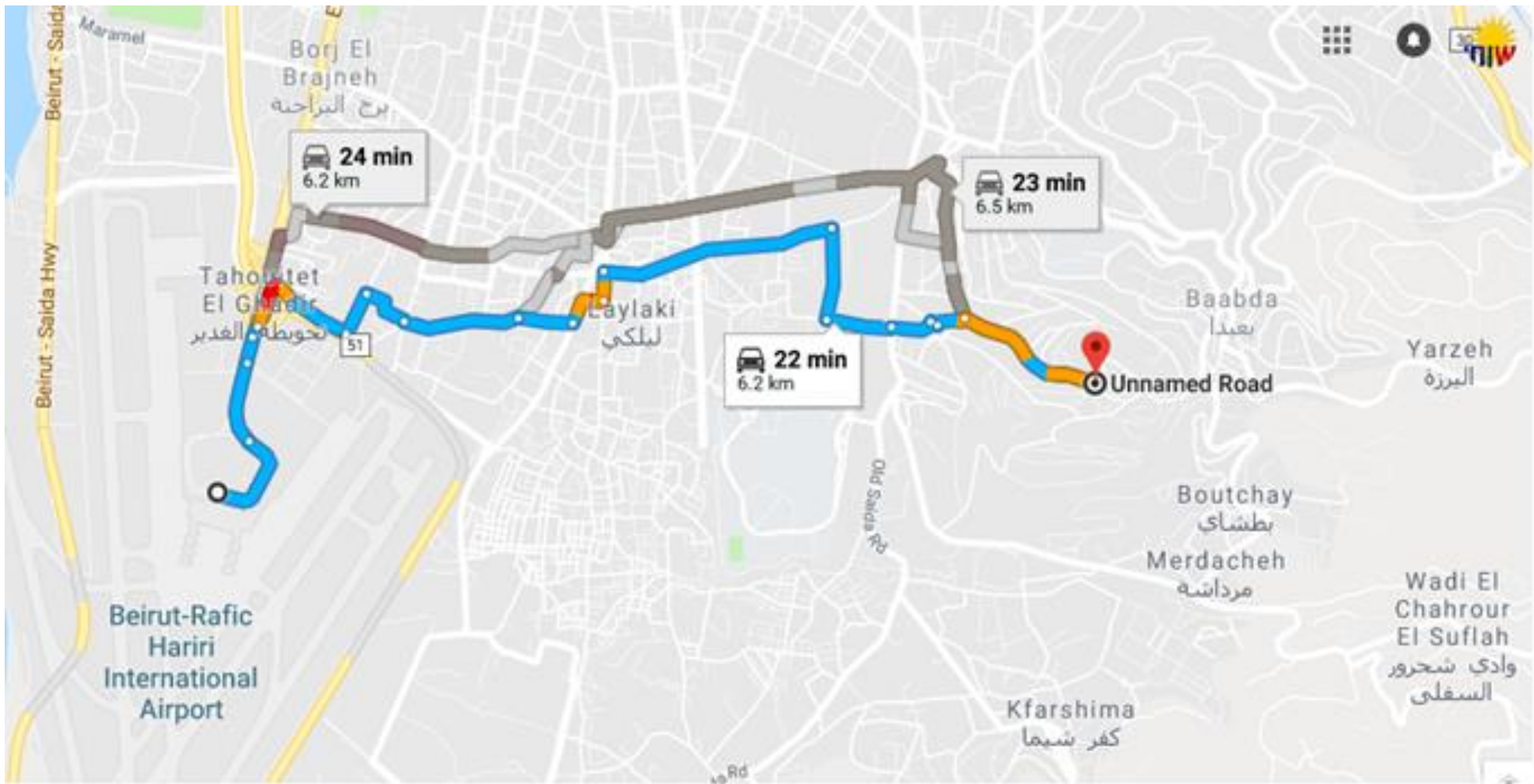
IEEE Power & Energy Chapter
Lebanon



IEEE EMBS, Lebanon Chapter

IEEE Computer Society, Lebanon Chapter





EBECEGC 2018 & DINWC 2018 Schedule

Date	Time	Activity
April 25, 2018 (Wednesday)	8:30 am – 9:15 am	Registration
	9:15 am – 9:45 am	EBECEGC2018 & DINWC3028 Opening Ceremony
	9:45 am – 10:00 am	Coffee break
	10:00 am – 10:45 am	Keynote Presentation by Prof. Habib ZAIDI
	10:45 am – 12:15 pm	Session 1
	12:15 pm – 1:00 pm	Keynote Presentation by Prof. Rachid OUTBIB
	1:00 pm – 2:00 pm	Lunch Break
	2:00 pm – 2:45 pm	Keynote Presentation by Prof. Mohamad ASSAAD
	2:45 pm – 4:30 pm	Session 2
	4:30 pm – 4:45 pm	Coffee Break
	4:45 pm – 5:45 pm	HEBA Workshop
	8:00 pm – 11:00 pm	Dîner GALA
April 26, 2018 (Thursday)	8:30 am – 9:00 am	Registration
	9:00 am – 10:30 am	Session 3
	10:30 am – 10:45 am	Coffee break
	10:45 am – 12:15 pm	Session 4
	12:15 pm – 13:00 pm	Keynote Presentation by Prof. Catherine MARQUE
	1:00 pm – 2:00 pm	Lunch Break
	2:00 pm - 4:00 pm	Session 5
	4:00 pm - 4:15 pm	Closing Ceremony
April 27, 2018 (Friday)	8:00 am – 12:00 pm	Tour

DETAILED PROGRAM

April 25, 2018

Title	Keynote Presentation
Room	Room A
Time	10:00 am – 10:45 am
Speaker	Keynote Presentation by Prof. Habib ZAIDI
Presentation Title	<i>New Horizons In Multi modality Molecular Imaging</i>
Chair	Rima ABDALLAH

Title	Session 1/ <i>Low-power/System Applications</i>
Room	Room A
Time	10:45 am – 12:15 pm
Chairs	Rachid OUTBIB & Denis HAMAD
	<i>Low-power Electronics and Systems</i>
	123- Development of a Multicopter-Based System for Air Quality Monitoring (Hussein Mazeh- Lebanon)
	131- Modeling and Experimenting the Thermal Behavior of a Lithium-ion Battery on a Electric Vehicle (Moemen Daboussy. Lebanon)
	<i>Wireless System Architectures and Applications</i>
	505 Top Development Indicators For Middle Eastern Countries (Denis Hamad- France)
	529 Chain-based Data Dissemination in Vehicular Ad-hoc Networks (VANETs) (Hanan Idriss- Lebanon)
	523 Enhance the Security in Smart Home Applications based on IOT-CoAP protocol (Salam Hamdan- Jordan)

April 25, 2018

Title	Keynote Presentation
Room	Room A
Time	12:15 pm – 1:00 pm
Speaker	Keynote Presentation by Prof. Rachid OUTBIB
Presentation Title	<i>Control and Diagnosis of PEM Fuel Cells</i>
Chairs	Maher RAFHI & Walid KAMALI

Title	Keynote Presentation
Room	Room A
Time	2:00 pm – 2:45 pm
Speaker	Keynote Presentation by Prof. Mohamad ASSAAD
Presentation Title	<i>Machine Type Communications (MTC) in 5G: Challenges, Algorithmic Design and Performance Analysis</i>
Chair	Abed Ellatif SAMHAT

April 25, 2018

Title	Session 2/ Wireless Communications
Room	Room A
Time	2:45 pm – 4:30 pm
Chairs	Mohamad ASSAAD & Walid KARAM
	511- TV White Space (TVWS) Trial in Oman Phase One (Technical) (Hamed Mohammed Almantheri- Oman) 519- A Game-Theoretic Approach for Power Control in a Full-duplex Femto-Relay Network (Omair Faraj- Lebanon) 525- Towards IP over LPWANs technologies: LoRaWAN, DASH7, NB-IoT (Wael Ayoub- France) 532- A Framework for the Design of Cost-Effective Wireless Body Area Networks with Efficient Data Collection (Mounib Khanafer- Kuwait) 513- Improving the Performance of TCP over Wireless Networks (Zainab Rahal- Lebanon) 510 A Study of New Techniques for Learning Management System to Accelerate Language Acquisition Using Structural Visual Models (Imad H. Tahini- Lebanon)

Title	HEBA Workshop
Room	Room A
Time	4:45 pm – 5:45 pm
Speakers	Sorina MORTADA & Clovis FRANCIS
Presentation Title	HEBA Workshop
Chairs	Hiba AL-SHEIKH & Nabil KARAMI

April 26, 2018

Title	Session 3 / WSN/Multiprocessor/Solar Power
Room	Room A
Time	9:00 am – 10:30 am
Chairs	Abdallah KASSEM & Mohamad NASSEREDDINE
	<p style="text-align: center;"><i>Computational Intelligence/ Wireless Communications</i></p> <p>506- Parallelization of Gradient-based Edge Detection Algorithm on Multicore processors (Lama Hamandi- Lebanon)</p> <p>512- Priority Management with Clustering Approach in Wireless Sensor Network (WSN) (Nahi Kandil- Canada)</p> <p style="text-align: center;"><i>Solar Power Generation</i></p> <p>105- Battery Sustainable PV Solar House: Storage Consideration for off Grid (Mohamad Nassereddine- UAE)</p> <p>104- PV Solar System for Residential Homes: PV Panel Tracking System using Electronics Circuits (Mohamad Nassereddine- UAE)</p> <p>132- Basic Controllers Multifunctional Security Platform (Abdel Hamid Abdo- Lebanon)</p>

Title	Session 4/ Bioinformatics / Computational Intelligence / Wireless Communications
Room	Room A
Time	10:45 am – 12:15 pm
Chairs	Catherine MARQUE & Mohammed EL-AFFENDI
	<p style="text-align: center;"><i>Bioinformatics and Scientific Computing</i></p> <p>125- Circular Structures of Puffer Fish: A New Metaheuristic Optimization Algorithm (Mehmet Cem Catalbas- Turkey)</p> <p>130- An IoMT Platform to Simplify the Development of Healthcare Monitoring Applications (Karim Saikali- Lebanon)</p> <p>114- Biometric Identification Using Photoplethysmography Signal (Aya Al-Sidani-Lebanon)</p> <p style="text-align: center;"><i>Computational Intelligence/ Wireless Communications</i></p> <p>507- Software Defect Detection by using Data Mining based Fuzzy Logic (M. Fatih ADAK- Turkey)</p> <p>516- Effect of UWB Channel Time Delay Parameters on TDOA Localization (Nahi Kandil- Canada)</p>

April 26, 2018

Title	Keynote Presentation
Room	Room A
Time	12:15 pm –13:00 pm
Speaker	Keynote Presentation by Prof. Catherine MARQUE
Presentation Title	<i>Uterine Electrical Activity Processing for Pregnancy Monitoring: Application to Preterm Labor Detection</i>
Chairs	Mohamad KHALIL & Habib ZAIDI

Title	Session 5 / Energy efficiency / Computational Intelligence / Wireless Communications
Room	Room A
Time	2:00 pm - 4:00 pm
Chairs	Hassan AMOUD & Fatih ADAK
	<i>Energy Efficiency/ Green Computing</i>
	126- Design of Cellular Manufacturing Systems with the Presence of Processing Time (Adnan Mukattash- UAE)
	129- Building Useful Smart Campus Applications Using A Retired Cell Phone Repurposing Model (Shamar Ward- Barbados)
	127- Efficiency vs. Number of Cells in Cell Formation (Adnan Mukattash- UAE)
	<i>Computational Intelligence/ Wireless Communications</i>
	530- Text Encoding for Deep Learning Neural Networks: A Reversible Base 64 (Tetrasexagesimal) Integer Transformation (RIT64) Alternative to One Hot Encoding with Applications to Arabic Morphology (Mohammed A ELAffendi- Saudi Arabia)
	527- Reducing Secondary User Collisions in TV White Space through a Geolocation Database Middleware (George Atta-Boateng – Ghana)
	528- Dependability Overview for Autonomous Vehicles and Reliability Analysis for Basic Safety Messages (Abdallah Dabboussi- France)
	517- On Performance Study of TWR UWB Ranging in Underground Mine (Nahi Kandil- Canada)
	501- Research on Face Recognition Based on Deep Learning (Xiao Han—China)