

Kassem M Danach
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Objective

- Pursuing a long term career in the field of teaching.

Personal information

- Birth date: October 21,1985
- Gender: Male
- Marital Status: Married
- Nationality: Lebanese

Education

- Big Data Analyst Professional Certificate, CNAM (Centre du Liban associé au Conservatoire national des arts et métiers - Paris), expected to certified year 2021.
- Postdoctoral researcher in Business Analytics at Université d'Artois, Bethune- France, for 2 years since September 2018.
- PhD in Computer and telecommunication engineering from Ecole Centrale de Lille– France, December 2016.
- Master II in Network engineer from Islamic University of Lebanon year 2014.
- Master II in Management Information System (MIS) from Islamic University of Lebanon year 2013.
- Bachelor (Bacc+5) of Engineering in Computer and Telecommunication Engineering from Islamic university in June 2008.

Journal Articles

- 1- **Danach, K.**, Gelareh, S., and Monemi, R., (2019). The Capacitated Single Allocation p-Hub Location Routing Problem: A Lagrangian Relaxation and a Hyper-heuristic Approach. *EURO Journal on Transportation and Logistics*.
- 2- Tarhini, A.,**Danach, K.**, Harfouche A., (2019) String Swarm Intelligence-based Hyperheuristic for Solving the Vehicle Routing Problem with Prioritized Customers. *Annals of Operations Research*.
- 3- Monemi, R., **Danach, K**, Khalil, W., Gelareh, S., Lima, F., and Aloise, D. (2015). Solution methods for scheduling of heterogeneous parallel machines applied to the workover rig problem. *Expert Systems with Applications*, 42, 4493--4505.
- 4- **Danach K** (2017) Service Network Design: A Literature Review. *Journal of Computer Engineering and Information Technology* 6:6.

- 5- **Danach, K.**, (2018). Heuristic Optimization Approach for Load Balancing problem With QoS Service. *J Comput Eng Inf Technol* 7:1
- 6- **Danach, K.**, Tarhini, A.,(2018) String Planning as a p-Hub Location Problem: a Hyperheuristic Approach , *Journal of international journal of transportation science and technology* (under reviewing).
- 7- **Danach, K.**, Tarhini, A.,(2019) Routing Mobile hospital for prioritized patients: an intelligent variable neighbourhood approach, *Expert Systems with Applications*(under reviewing).
- 8- Tarhini, A.,**Danach, K.**, Harfouche A., (2019) String Swarm Intelligence-based Hyperheuristic for Solving the Vehicle Routing Problem with Prioritized Customers(under reviewing).

9- دنش ق. (2018). بين خصوصية الفرد وتقنيات المعلوماتية لمحاربة الإرهاب /الحدث.

Conference Articles

- 1- Tarhini, A.,**Danach, K.**, Harfouche A., (2019) String Swarm Intelligence-based Hyperheuristic for Solving the Vehicle Routing Problem with Prioritized Customers. *ICTO*. Paris.
- 2- Fneish, M., Sbeity, I., & **Danach, K.** (2019). Machine Learning Techniques for Fraud Detection: Case study on Credit Cards' Transactions Dataset. *AISD*. Beirut.
- 3- Gelareh, S., **Danach, K.**, Monemi, R. N., & Nagih, A. (2019). Humanitarian Aids Distribution Network Design Problem: A case study. *AISD*. Beirut (**Best Paper Award**).
- 4- **Danach, K.**, Khalil, W., Fawaz, M., Noura, Hassan (2018). Hierarchical Hub Location Center Single Assignment: A Facility Network Design for NGOs in Lebanon. *ROADEF*. Lorient, France.
- 5- **Danach, K.**, Tarhini, A. (2018). Data Mining Methods Based Hyperheuristic Approach for Schedule Plan to Higher Relief Council. *EURO 29*. Valencia, Spain .
- 6- Gelareh, S., Monemi, R., **Danach, K.** (2017). Network Design, Fleet Deployment and Empty Repositioning in Liner Shipping. *LCIS*. Beirut, Lebanon (**Best Paper Award**).
- 7- **Danach, K.**, Tarhini, A., Haj Hassan, J., (2017). L'APPLICATION DE LA FOUILLE DE DONNEES POUR LA LUTTE CONTRE LE TERRORISME: CAS DES APPELS TELEPHONIQUES AU LIBAN. *LCIS*. Beirut, Lebanon.
- 8- **Danach, K.**, Al Haj Hassan, J., & Tarhini, A. (2016). Mobile hospital routing for prioritized patients: an intelligent variable neighbourhood approach. *ICTO*. France.
- 9- **Danach, K.**, Gelareh, S., Khalil, W., Semet, F (2016). Mobile hospital routing for prioritized patients: an intelligent variable neighbourhood approach. *EWGLA*. Malaga, Spain.
- 10- Tarhini, A., **Danach, K.**, Shour, A, (2016). The Vehicle Routing Problem with picked-up delivery: a heuristic approach. 28th European Conference on Operational Research. Pozan, Poland.

- 11- **Danach, K.**, Gelareh, S., Khalil, W., Monemi, R. N., Semet, F (2016). Capacitated Single Allocation p-Hub Location Problem: Hyperheuristic Approaches with different Selection Methods. *ROADEF*. Compiègne, France.
- 12- **Danach, K.**, Khalil, W., Gelareh, S., Tarhini, A, (2016). Metaheuristic vs Reinforcement Learning Based Hyperheuristic applied to Capacitated Single Allocation p-Hub Location Problem. *LCIS*. Beirut, Lebanon.
- 13- **Danach, K.**, & Al-Haj Hassan, J. (2016). Clinical Decision Support System with Routing Heterogeneous Mobile Hospitals: A Data Mining and A Hyperheuristic approaches. *TORS*. Sousse, Tunisia.
- 14- **Danach, K.**, Khalil, W., Gelareh, S., Semet, F., & Junior, F. (2015). Capacitated Single location P-Hub Location Routing : Hyper-heuristic Approach. *ROADEF*. Marseille, France.
- 15- Monemi, R., **Danach, K.**, Gelareh, S., & Khalil, W., (2015). Solution methods for scheduling of heterogeneous parallel machines applied to the workover rig problem. 8th International Conference of the Iranian Society of Operations Research, Ferdowsi University of Mashhad, May, 2015.
- 16- **Danach, K.**, Khalil, W., & Gelareh, S. (2015). Multiple Strings Planing Problem in Maritime Service Network: Hyper-Heuristic Approach. *TAECE*. Beirut, Lebanon.
- 17- Shour, A., **Danach, K.**, W., & Tarhini, A. (2015). Modified Clarke Wright algorithms for solving the Realistic Vehicle Routing Problem. *TAECE*. Beirut, Lebanon.
- 18- **Danach, K.**, Haj Hassan, J., Khalil, W., Gelareh, S., & Kalakish, A. (2015). Routing Heterogeneous Mobile Hospital With Different Patients Priorities: Hyper-Heuristic Approach. *DICTAP*. Beirut, Lebanon.
- 19- **Danach, K. M.**, Khalil, W., Junior, F., & Gelareh, S. (2014). Routing parallel heterogeneous machines in maintenance planning: A hyper-heuristic approach. *ICCSA*, (p. 441). Le Havre, France.
- 20- **Danach, K.**, Khalil, W., & Gelareh, S. (2014). Hyper-heuristic Applied to Maritime Service Network. *IFORS*. Barcelona, Spain.

Practical Training

- 1- **Data Science Summer school** is co-organized by the Data Science Initiative of École Polytechnique and DATAIA Institute in École Polytechnique, Paris 2018.
- 2- **Arduino workshop** is organized by Berythech (FAB Lab), Lebanon 2018.
- 3- **Doctoriales** is organized by the College Doctoral Lille Nord de France, Lille 2016.
- 4- **Workshop on Smart Cities and Urban Planning**, Beirut Arab University (BAU), December 2017.
- 5- **Decisional Analytics and Data-Driven Optimization via Search Heuristics**, Islamic University of Lebanon (IUL), July 2017.

Professional Activities

- Vice President for publication in Lebanese Association for Information Systems (2018).

- Member of International Institute of Engineers & Researchers (2018).
- Member of Société Française de Recherche Opérationnelle et Aide à la Décision (ROADEF) since 2015.
- Member of EURO Working Group on Vehicle Routing and Logistics Optimization (VeRoLog) since 2015.
- Member of EURO Working Group on Locational Analysis (EWGLA) since 2015.
- Member of Lebanese Association for Information Systems (LAIS) since 2015.
- Member of OR Society since 2016.

Conference Activities

- Session co-chair, Hub and Spoke in Land and Maritime Transport, International Conference on Computers and Industrial Engineering (CIE45), 2015, Metz, France.
- Member of the scientific committee in ICCTA 2019, Istanbul, Turkish.
- Session co-chair, Heuristic Methods for Combinatorial Problems, Lebanese Conference on Information Systems (LCIS), 2016, Beirut, Lebanon.
- Track co-chair, L'innovation : « Savoir-faire et savoir agir complexe », Lebanese Conference on Information Systems (LCIS), 2016, Beirut, Lebanon.
- Member of the scientific committee in LCIS 2016.
- Member of the organizing committee in LCIS 2017

Reviewing

- Reviewer for several conferences and scientific journal such as:
 - IEEE Intelligent Transportation Systems Transactions
 - International Journal of Services and Standards (IJSS)
 - LCIS 2017 -2018
 - ICTO 2017 -2018
 - ICCTA2018-2019
 - Oriental Journal of Computer Science and Technology

Research Interests

- 1- Operational Research
- 2- Business Analytics
- 3- Scheduling and Routing problem
- 4- Logistics and Supply chain
- 5- Heuristics, Meta-heuristic, math-heuristic and hyper-heuristic
- 6- Bioinformatics

- 7- Virtual Network Function
- 8- Cyber-attack
- 9- Optimization

Work Experience (Islamic University Of Lebanon)

October 2011 – present

Full time Lecturer at Faculty of Economics and Business Administration

December 2014 - November 2018

Coordinator of Management Information System Department (Tyr branch)

November 2018 – Present

Head of Management Information System Department.

Programming Skills

VB .Net – C# .Net – ADO .Net – ASP.Net – Labview – Python - Advanced C –
Advanced JAVA – JSP – Assembly – Prolog – Matlab

Data Analytics Skills

R language - Keras Python – TensorFlow Python – Orange data mining – RapidMiner
– Weka - SPSS

Database Administration Skills

Microsoft SQL server, MySQL

Teaching

Islamic University of Lebanon

2009 - Present

- 1- Network (French & English sections).
- 2- Software application (HTML, Ms Access...)
- 3- Computer Application.
- 4- Visual Programming.
- 5- Algorithm and Data structure.
- 6- Web programming
- 7- Software engineering
- 8- Database
- 9- Advanced Database
- 10- Management Information System
- 11- Network
- 12- Java 1

13- Object Oriented Programing

Languages

- Arabic , French , English

References

- Dr. Anwar Tarhini (Tyr Branch director, Islamic University Of Lebanon) mobile: 03 00 36 47, email: Anwar.tarhini@iul.edu.lb)
- Dr. Wissam Khalil (Head of core courses at Faculty of economics and business administration in Islamic University Of Lebanon mobile: 03 980 819, email: wissam.khalil@iul.edu.lb)

Documents are upon your request.