

Hassan NASSER, PhD, Eng

Lebanese, French

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VISION

I do believe that the way for achieving great decisions and optimized processes is to create transparent data-driven systems. Three emergent technologies will help in this concern: Internet of things, data science and blockchain. Based on my skillset and scientific curiosity, I am looking forward to creating value using Data Science.

In preparation: Senior Big Data Analyst **Certification** with DSCA (Data Science Council of America).

TRAINER EXPERIENCE

Jan 2020	Samsung Innovation Campus (with Misk academy and IMTIAZ) <ul style="list-style-type: none">(10 days) Internet of things. Topic covered: devices, connectivity, platforms, big data, remote control.	Riyadh, KSA
Feb 2019	Lebanese International University Training: <ul style="list-style-type: none">(3 Days) Internet of things. Topic covered: devices, connectivity, platforms, big data, remote control.	Bekaa, Lebanon
Feb 2018	Lebanese International University Training: <ul style="list-style-type: none">(3 Days) Introduction to Big Data Analytics with SQL.(3 Days) Big data analytics with NoSql and Neo4J	Bekaa, Lebanon
May 2018	Order of Engineers and Architect Tripoli + Lebanese University (faculty of engineering): Training: <ul style="list-style-type: none">(3 Days) Internet of things. Topic covered: devices, connectivity, platforms, big data, remote control.(3 Days) 3D printing: intro, 3D design with Autodesk fudion 360, 3D printer configuration and demo printing using Cetus3D	Tripoli, Lebanon
Jun 2017	Beirut Digital District Training: <ul style="list-style-type: none">(2Days) Introduction to Big Data Analytics with SQL.(2 Days) Big data analytics with NoSql and Neo4J	Beirut, Lebanon
Apr 2017	Beirut Digital District Training: <ul style="list-style-type: none">(3 days) Internet of things. Topic covered: devices, connectivity, platforms, big data, remote control.	Beirut, Lebanon
Mar 2017	Arabnet (conference) Talk: <ul style="list-style-type: none">(3 hours) Internet of things. Topic covered: introduction, connectivity, demo	Beirut, Lebanon
Feb 2017	Lebanese International University Training: <ul style="list-style-type: none">(3 Days) Internet of things. Topic covered: devices, connectivity, platforms, big data, remote control.	Bekaa, Lebanon

EDUCATION

Sep 2009 – Apr 2014	University of Nice Sophia Antipolis Ph.D. in Distributed Computing	Nice, France
Sep 2009 – Sep 2010	University of Nice Sophia Antipolis MSc. in Computer Science With emphasize on computational biology	Nice, France
Sep 2008 – Sep 2009	The University of Technology of Compiegne Engineering/MSc in Electronics Engineering With emphasize on science and technology for health	Compiegne, France

WORK EXPERIENCE - Research

2016 and 2017	UNITED NATIONS Innovation researcher <ul style="list-style-type: none">- Helping in structuring and compiling studies about the innovation ecosystems in the MENA region Reference: Dr. Nibal Idlebi (idlebi@un.org)	Beirut, Lebanon
Sep 2014-Sep 2015	INRA Research Engineer <ul style="list-style-type: none">- Helping PhD students optimizing their code architecture.- Enhancing and applying the good practices on existing libraries Reference: Dr Patrick Coquillard (Patrick.COQUILLARD@unice.fr)	Nice, France

WORK EXPERIENCE – EDUCATION (2000+ hours in Engineering and Computer Science teaching)

2016-Current	Lebanese International University Courses: <ul style="list-style-type: none">- Machine learning and artificial intelligence- Distributed systems and cloud computing- Big Data and Big data analytics- Advanced algorithms- Image processing- Advanced signal processing- Introduction to computers (word, powerpoint, excel)- Linux operating systems- Software design- Modeling and simulation- Advanced Java- Microprocessors and microcontrollers- Data acquisition systems- Internet of things- Digital electronics- Medical imaging- Senior projects- Thesis supervising Contribution: <ul style="list-style-type: none">- 5 conferences papers- Several prizes at LIRA and local competitions References: Dr. Mohamad Hajj Hassan (mohamad.hajjhassan@liu.edu.lb) Dr. Ahmad Muhieddine (ahmad.muhieddine@liu.edu.lb)	Beirut, Lebanon
2017-Current	Notre Dame Universite Courses: <ul style="list-style-type: none">- Introduction to Biomedical Engineering-	Zouk Mosbeh, France
2016-2017	American University for Science and Technology Courses: <ul style="list-style-type: none">- Programming I and II Reference: Dr. Elie Nasr	Beirut, Lebanon
2017-2018	Arts, Science and Litterature University in Lebanon Courses: <ul style="list-style-type: none">- Advanced programming using Java- Operating systems Reference: Dr. Bilal Saeed (bs064@aub.edu.lb)	Beirut, Lebanon
2013-2014	Supinfo International University Courses:	Nice, France

- Linear algebra
- Database
- Set Theory
- Statistics
- Linux operating systems
- Data Mining and Data Warehouses
- Data analytics with Qlick

2011-2014

Polytechnique Nice Sophia Antipolis

Nice, France

Courses:

- Microprocessors and Microcontrollers
- Digital electronics

ENTRENEURSHIP EXPERIENCE (3+ Startups experience)

Feb 2018 – Dec 2019

KONCHEF SAL

Beirut, Lebanon

Chief Executive Officer

www.konchef.com

- Raised \$140k for early-stage funding
- Designed the tech platform architecture and lead the tech team to develop a custom platform
- Acquired a wealthy experience about how to prioritize the axis of work (Tech, Marketing, Commercial, Testing, ...) in the startup world

References:

Fawzi Rahal (GM of Flat6Labs)

Mario Ramadan (Accelerator manager at Agrytech)

Rawad Assaf (CTO at UK Lebanon Tech Hub)

Sep 2015 – Jul 2016

THERAPIXEL

All Lebanon

Country Manager

www.therapixel.com

- Building awareness about the startup in Lebanon
- Established first contact with leads and decision-makers
- Official representative
- Foreseeing technical alignments to install the solution in a local hospital and report requirements accordingly

References:

Olivier Clatz (Ex-CEO of Therapixel).

2010

STAT AND SOFT

Nice, France

Founder

www.statandsoft.com (inactive):

- Raised \$10k in the idea stage.
- Team non-synergy led to closing down

ENTREPRENEURSHIP AWARDS

2011

Second Prize of the entrepreneurship competition organized by UNICE Foundation

Nice, France

<http://etudiants.nice.fr/la-fondation-unice-finance-les,2809.html>

2012

First Prize of the entrepreneurship competition organized by UNICE Foundation

Nice, France

2010

First Place in the startup weekend Nice Sophia Antipolis

Nice, France

PROFESSIONAL TRAINING

2013

Conceptual and Mathematical Foundations of Conceptual and Mathematical Foundation of Embodied Intelligence

Max-Planck institute in Leipzig, Germany

2012

Multielectrode systems: experiment preparation, acquisition, and spike sorting

Centro Interdisciplinario de Neurociencia de Valparaiso, Chile

2011

Project management

INRIA Sophia Antipolis, France

2011	How to speak in public	University of Nice Sophia Antipolis, France
2010	English for scientific writing	INRIA Sophia Antipolis, France
2014	Entrepreneurship for Ph.D. fellows	PacaEst incubator, France
2014	Conflicts management	University of Nice Sophia Antipolis, France

SUPERVISED ENGINEERING PROJECTS

2020	<ul style="list-style-type: none"> - Breast cancer detection using convolutional neural networks - Brand-agnostic touchless system for surgical operating rooms
2019	<ul style="list-style-type: none"> - Automated classification of Alzheimer's diseases from MRI images using convolutional neural network - 3D scanner for the arm - Pacifier thermometer for infants - Wearable real-time heartbeat monitor for pregnant
2018	<ul style="list-style-type: none"> - An Integrated System for Bone Healing Using 3d Scanner/Printer and LIPUS Technology - Portable infant warmer - Electronic blind stick - Automatic Cardio cerebral resuscitation hanging to patients' beds - Smart military vest - Smart non-subjective stethoscope - Epilepsy-Friendly Driven Car - Anti-Ulcer Chair for Paralyzed Patients - Connected Holter monitor with automatic diagnosis ability - Smart computer and house control for paralyzed patients using eye-tracking through a webcam - Eye Controlled Application
2017	<ul style="list-style-type: none"> - Touchless medical image navigation system for surgery - Gesture image viewer and editor - Smart Bed - Smart medical monitor - Wearable airbag system for elderly - Smart medical box - Portable serum device - Diet box - Apnea detection machine

Languages

With humans	Native French Native Arabic Fluent in English
With machines	Advanced: <ul style="list-style-type: none"> - C/C++ - Python - Java - Matlab - SQL - Assembly Intermediate: <ul style="list-style-type: none"> - TensorFlow - Spark - Hadoop - R - HTML/CSS/JS - MongoDB - Spark - LabView - Hue, Hive and Impala
Frameworks	Good notions on Laravel and Django

LIST of PUBLICATIONS

Google Scholar link: <https://scholar.google.fr/citations?user=L97ZODwAAAAJ&hl=>

CONFERENCES

- 2019** Automated Classification of Alzheimer's Disease From Brain MRI Images Using Convolutional Neural Networks. Ghadi El Hajj, Hassan El Sayed, Hassan Nasser. 2019, In Preparation.
- 2019** Diagnostic Superficial Vein Scanner, Y Ayoub, S Serhal, B Farhat, A Ali, J Amatoury, H Nasser, MA Ali, 2018 International Conference on Computer and Applications (ICCA)
- 2017** A New Dumb's Communication System, Lilian Al Tinnawi, Reem Harb, Hassan Nasser, Amira Zaylaa, Lara Hamawy, 23rd INTERNATIONAL SCIENTIFIC CONFERENCE OF LAAS, 2017.
- 2016** B. Cessac, P. Kornprobst, H. Nasser, T. Vieville, ENAS: novel software for analyzing large scale biological neural networks activity. In preparation (Draft available on request).
- 2013** H. Nasser et B. Cessac, Inferring spatio-temporal correlations in large scale neural networks. chez Maxent Conference, Canberra, Australia.
- 2013** H. Nasser, S. Kraria et B. Cessac, EnaS: a new software for neural population analysis in large scale spiking networks. BMC Neuroscience.
- 2012** B. Cessac, R. Cofre et B. Cessac, On the ubiquity of Gibbs distributions in spike train statistic. Chez Third annual meeting of the Multi-electrodes systems and signal processing to study neural networks, Marseille, France.
- 2012** H. Nasser, O. Marre, B. Michael II et B. Cessac, Spatiotemporal Gibbs distribution analysis of spike trains using Monte Carlo method, chez Research in Encoding And Decoding of Neural Ensembles, Santorini, Greece.
- 2012** H. Nasser, S. Kraria, V. Thierry, O. Marre et B. Cessac, Analyzing large-scale spike trains data with Spatio-temporal constraints, NeuroComp/KEOpS'12 workshop.
- 2010** Parametric estimation of spike train statistics by Gibbs distributions: an application to bio-inspired and experimental data, B Cessac, JC Vasquez, H Nasser, H Rostro-Gonzalez, T Viéville, Cinquième conférence plénière française de Neurosciences Computationnelles
- 2010** Parameter Tuning in the virtual retina using synaptic plasticity, H Nasser, B Cessac, T Vieville, P Kornprobst, M Antonini

JOURNALS

- 2017** PRANAS: A new platform for retinal analysis and simulation, B Cessac, P Kornprobst, S Kraria, H Nasser, D Pamplona, G Portelli, Frontiers in neuroinformatics 11, 49
- 2014** H. Nasser et B. Cessac, Parameter Estimation for Spatio-Temporal Maximum Entropy Distributions: Application to Neural Spike Trains. Entropy, vol. 16, pp. 2244-2277.
- 2013** H. Nasser, B. Cessac et O. Marre, Spatio-temporal spike train analysis for large scale networks using the maximum entropy principle and Monte Carlo method. Journal of Statistical Mechanics: Theory and Experiment, p. 3006.
- 2010** B. Cessac, H. Nasser et J. C. Vasquez, Spike trains statistics in Integrate and Fire Models: exact results arXiv:1008.5074.