

Curriculum Vitae

Assistant professor at National Engineering School of Gabes

(Department of Communications and Networks engineering)


Instructor on Huawei Talent Platform (Artificial Intelligence)


Siemens Certified S7 Programmer (expert level)

PERSONAL INFORMATION



Dr.-Ing. Ridha El Hamdi

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Gender Male

Date of birth 07/09/1980

Nationality Tunisian

Civil Situation Married, 4 children

ACADEMIC BACKGROUND

- April 2012 : Philosophiæ Doctor (Ph.D.) in Electrical Engineering
National School of Engineers of Sfax, University of Sfax, Tunisia
Major field: Computational intelligence
Minor field: Optimization of Neural Networks
Dissertation Title: "Approches évolutives hybrides pour la synthèse des réseaux de neurones multicouches"
- December 2006 : Master of Science (M.Sc.) in Automatic Control and Intelligent Techniques
National School of Engineers of Gabes, University of Gabes, Tunisia
- June 2004 : Engineer in Electrical Engineering - Automatic Control
National School of Engineers of Gabes, University of Gabes, Tunisia

WORK EXPERIENCE

- September 2021 : • *Siemens Certified S7 Programmer (expert level)*
- August 2020 : • Huawei Certified ICT Associate Artificial Intelligence (HCIA-AI) , HUAWEI, 2020
• Huawei Certified Academy Instructor (HCAI), HUAWEI, 2020
- Since 2016 : Assistant professor at National Engineering School of Gabes, Tunisia
Department of Communications and Networks engineering
- Taught courses in
 - Internet of Things (IoT)
 - Microprocessor Design/Computer Architecture
 - Embedded Systems
 - Network Protocols
 - Graph Theory
 - Optimization for Decision Making
 - Directed graduate research projects
 - Directed undergraduate end of studies projects
- Avril 2015 : Consultant at USAID, responsible for high level training in "embedded systems and intelligent technologies".

2012 - : Assistant professor at National Engineering School of Gabes, Tunisia
 2016 Department of Electrical Engineering- Automatic Control

- Taught courses in
 - Artificial Intelligence
 - Interfacing Techniques
 - Microprocessors & Microcontrollers
 - Digital Signal Processing
 - Logical Systems
 - C++ language programming
- Directed graduate research projects
- Directed undergraduate end of studies projects

2007- Contractual Assistant at National Engineering School of Gabes, Tunisia
 2011 Department of Electrical Engineering- Automatic Control

- Taught courses in
 - Microprocessors & Microcontrollers
 - Programmable Logic Controllers
 - Interfacing Techniques
 - C language programming
- Directed undergraduate end of studies projects

PERSONAL SKILLS AND COMPETENCES

Languages : • Mother Tongue: Arabic

- Other Languages:
 - French: Read, spoken and written
 - English: Read, spoken and written

Driving licence : Category B

Technical skills and competences : • Computational intelligence: artificial neural networks, evolutionary computation, Deep Learning, fuzzy logic, swarm intelligence, ...

- Information and communications technology: IoT, Cloud, Wifi, BT, BLE, ZigBee, Lora, NB-IoT, EnOcean ...
- Automatic control systems: Modelling, simulation, optimization and control of systems
- Embedded systems: Raspberry Pi, ESP8266, ESP32, UDOO Quad, My RIO, Arduino, ...
- Programmable Logic Controllers: Siemens SIMATC S7, TIA Portal
- Robots: Nao (Aldebaran), MICO (Kinova), Robotino (Festo Didactic)

Computer skills and competences : • Operating systems: Macintosh, Windows, Linux, Android

- Programming languages: C/C++, Python, Php, ...
- Programs: Xcode, Labview, SIMATIC Manager, Wincc, Matlab, Windev Mobile, ...

ADDITIONAL INFORMATION

Chapters in edited scientific books : • Njah, M. and El Hamdi R. 'Design and Implementation of a Reactive Navigation System for a Smart Robot Using Udoos Quad', New Developments and Advances in Robot Control, Studies in Systems, Decision and Control 175, pp. 285-299, 2019.

Journal Articles : • Njah Mohamed and El Hamdi Ridha, "A Constrained Multi-Objective Learning Algorithm for Feed-Forward Neural Network Classifiers", Engineering, Technology & Applied Science Research, Vol.7 No.3, pp. 1685-1693, 2017.

- Njah Mohamed and El Hamdi Ridha, "Evolutionary Design of Multilayer and Radial Basis Function Neural Network Classifiers: an Empirical Comparison", IJCSNS (International Journal of Computer

Science and Network Security), Vol.16 No.6, pp. 86-93, 2016.

- El Hamdi R., Njah, M. and Chtourou, M. 'Multilayer perceptron training using an evolutionary algorithm', Int. J. Modelling, Identification and Control, Vol. 5, No. 4, pp.305-312, 2008.

Conferences

- El Hamdi Ridha and Njah Mohamed, 'A constraint handling technique for implementing Multi-Objective Evolutionary Neural Networks', 15th International Multi-Conference on Systems, Signals & Devices (SSD), 2018.
- El Hamdi R., Njah, M. and Chtourou, M. 'A Memetic Evolutionary Approach to Radial Basis Function Networks' EMS, pp. 92-96, 2009 Third UKSim European Symposium on Computer Modeling and Simulation (Athens Greece), 2009.
- El Hamdi R., Njah, M. and Chtourou, M. 'Breast cancer diagnosis using a hybrid evolutionary neural network classifier', 18th Mediterranean Conference on Control and Automation (Marrakech, Morocco), pp.1308-1315, 2010.
- El Hamdi R., Njah, M. and Chtourou, M. 'A hybrid evolutionary design of neuro-fuzzy systems', 7th International Multi-Conference on Systems, Signals and Devices (Amman, Jordan), 2010.
- El Hamdi R., Njah, M. and Chtourou, M. 'An Evolutionary Neuro-Fuzzy Approach to Breast Cancer Diagnosis', 2010 IEEE International Conference on Systems, Man and Cybernetics (Istanbul, Turkey). pp. 142-146, 2010.

Workshop and
Other Activities

- 3-day teacher training 'SIMATIC Manager & WinCC: Application to the control of a MPS®-PA station (Festo Didactic)'. Training and Learning Center of Sidi-Bouزيد, January 2013.
- 3-day teacher training 'SIMATIC Manager & WinCC: Application to the control of an electropneumatics equipment set and a MPS-205 station (Festo Didactic)'. National School of Engineers of Monastir, March 2013.
- 2-day teacher training 'Arduino WorkShop'. University of Gabes, February 2014.
- 10-day teacher training 'Embedded Systems and Smart Technologies'. University of Gabes, ISET Avril 2015.