

Ibrahim Farouk Bouguenna



EDUCATION

- 09/2016 -
approx 02/2020
- PhD in Electronics (Control And Systems)**
University of Sidi Bel Abbes -Algeria
Thesis: Robust Control of Traction Chain of a Multisource Electric Vehicle
Focus: Electric Vehicle, Control of Systems, Energy Management, Storage Systems.
- 01/2007 -
approx 11/2009
- Master of Electronics (Photovoltaic Systems)**
University of Science and Technology -Oran -Algeria
Thesis: Study and Design of a Prototype of an Electric Vehicle
Focus: Electric Vehicle, Control of Systems, Storage Systems.
- 09/2000 -
approx 06/2006
- Engineer Diploma in Electronics (Industrial Control)**
University of Science and Technology -Oran -Algeria
Thesis: Study and Design of a Vibration Measuring Device
Focus: Industrial Control, Predictive maintenance.
- 09/1997 -
06/2000
- High School Diploma (Scientific)**

WORK EXPERIENCE

- 2016 -
till present
- Teaching Assistant - Faculty of Science and Technology**
University of Mascara -Algeria
Most important course: Digital Electronics - Fondamental Electronics - Microprocessor System - Conception of Microprocessor System - Digital Signal Processor - FPGA.
- 2015
- Head of Department of Passive Infrastructure Unit**
Algérie Télécom Company - Algeria
Tasks: Manage all passive infrastructure installation operations. Launch and follow-up of fiber optic cable laying projects.
- 2013-2014
- Head of the equipment maintenance and operation department.**
Algérie Télécom Company - Algeria
Tasks:
Manage all maintenance operations and installation of telecommunications equipment.
- 2012-2013
- Gas Engineer on board an LNG Cargo ship**
Hyproc Shipping Company - Algeria
Tasks:
Ensure the maintenance of cargo equipments on board LNG carriers (cargo pump, automatic valve, cargo compressor) and the operations of loading and unloading.
- 2010-2012
- Electrical Engineer on board an LNG Cargo ship**
Hyproc Shipping Company - Algeria
Tasks:

Ensure the maintenance of electrical equipment on board LNG tankers (engine room, deck, and accommodation of seafarers).

2007-2010

Lead engineer.
Algérie Télécom Company - Algeria

Tasks:

maintenance of transmission equipments, and ensure the proper functioning of telecommunication networks in terms of energy.

PUBLICATIONS

- 2019 **Robust neuro-fuzzy sliding mode control with extended state observer for an electric drive system.**
Journal: Energy
Link: <https://doi.org/10.1016/j.energy.2018.12.101>
- 2018 **Electronic Differential and Neuro-Fuzzy Sliding Mode Control with Extended State Observer for an Electric Vehicle System.**
Journal: E3S Web of Conferences
Link: https://www.e3sconferences.org/articles/e3sconf/abs/2018/36/e3sconf_icren2018_00007/e3sconf_icren2018_00007.html
- 2017 **Hybrid Fuzzy Sliding Mode Speed Control for an Electric Vehicle Drive.**
Journal: International Journal of Power Electronics and Drive Systems
Link: <http://ijpeds.iaescore.com/index.php/IJPEDS/article/view/8355>

CONFERENCES

- 04/2018 **Electronic Differential and Neuro-Fuzzy Sliding Mode Control with Extended State Observer for an Electric Vehicle System.**
International Conference on Renewable Energy (ICREN 2018) Barcelona, Spain.
- 06/2017 **Robust Neuro fuzzy sliding mode speed control for an electric drive system.**
10th International Conference On Sustainable Energy & Environmental Protection - Slovenia (SEEP2017).
- 06/2017 **Electronic Differential with Backstepping Control for Vehicle Propulsion System.**
10th International Conference On Sustainable Energy & Environmental Protection - Slovenia (SEEP2017).
- 06/2011 **Joint IAEA – ICTP Advanced School on “Development and characterization of materials for hydrogen-based energy systems: Role of nuclear technology” - Trieste, Italy.**
- 07/2010 **Study and Optimization of a Tandem Solar Cell A-Si:H/A-SiGe:H - 9^{ème} congrès National de la Physique et de ses Applications (CNPA2010)- Ouargla- Algeria.**
- 01/2009 **Modélisation et Optimisation d'une cellule Solaire Tandem A-Si:H/A-SiGe:H**
International Conference on Electrotechnics (ICEL2009)- Oran- Algeria.

PhD INTERNSHIP

- 11/2019 **Internship - Institute for Electrical Drive Systems and Power Electronics**
Technical University of Munich - Germany
Focus: *working on the new predictive control method applied on electric drive.*
- 12/2018 **Internship - Institute for Electrical Drive Systems and Power Electronics**

Technical University of Munich - Germany

Focus: working on the new predictive control method applied on electric drive.

TRAINING

- 01/2020 **Training on "Programmable Logic Controller PLC : Level I, II, and WINCC Flexible (TIA PORTAL)**
CFBI CENTER -Algeria
Focus: PLC (Siemens), Familiarize with S7-300-1200 PLC and TiA Portal software.
-extension modules, Tia software, comparison with S7-300 and STEP 5.
-Parameterization of PLC (hardware parameters, create hardware set in software)
- Hardware parameterization part 1 (I/O, PROFINET-interface, online diagnostics, time-settings)
- Hardware parameterization part 2 (memory bytes, generators, protection,web-server), Watch and force table and more advance topics .
- OB,FB,DB,FC – how to use
-Realisation of many small industrial project.....
- 09/2016 **Training on "Hardware in The Loop of Electric Drive System: Application on Vehicle, Plane and Electric Ship"**
Polytechnic Military School -Algeria
Focus: Electric drive system,Electric vehicle,Electric ship,HIL.
- 07/2011 **Contribution in Summer university on "Renewable Energie"**
University of Aboubekr Belkaid of Tlemcen -Algeria
Focus: Photovoltaic systems
- 2010 **Maritime Familiarization**
National Maritime School -Algeria
Focus: Maritime familiarization with the maritime world, work on board ship, maritime security, maritime pollution, study of all maritime conventions (SOLAS, MARPOL, ISPS), maritime law.
- 2010 **Certifications: Medical first aid - Liquefied Gas Tanker Training Program-Transport of Liquefied Gas- Medicine on board- ISPS Familiarization (PFSO, SSO, CSO)- Advanced Firefighting- survival at sea, Electrical accreditation.**
National Maritime School -Algeria

SKILLS

Languages

Arabic Mother tanguge
French Fluent
English Average

IT

Experience with Matlab ,C++,Assembly 80x86, Motorola 68xxx, PIC 16Fxx-PIC 16F8xx-18Fxx,VHDL, Ladder,TIA Portal
Familiar with Python.
Microsoft Office, Windows , Linux

KEY COMPETENCES

Familiar with FPGA (Xilinx) cards.
Familiar with programming Digital Signal Processor TMS320C6713
Experiiece with using Arduino, and Raspberry cards.
Familiar with Programmable Logic Controller PLC Siemens .
Basic knowledge on Computer Vision, Machine learning, Deep Learning, Facial recognition.

Familiar with control and programming quadcopter .

INTERESTS

Private

Reading, jogging, Internet, Traveling

Business



I am currently taking courses to improve my english abilities



I take online courses in the field of artificial intelligence, Self driving car in Udemy, Coursera, Edx

VOLUNTEER WORK

Member in Algerian Organization for Consumer Protection and Guidance and his surroundings

Tasks: *-Consumer awareness and education*

-Defending the financial and moral interests of the consumer

- Work to upgrade the quality of consumables and services

- Work to reduce cases of fraud and deception in the product and services and confront them.

-Ensuring a healthy and safe environment for the life of the consumer and the lives of the people who care for them.

PRIVATE DETAILS

Birthday/ -place: 29.01.1983, Mascara -Algeria

Nationality: Algeria

Algeria 10.08.2020