

MOHAMED TARNINI CV



- 1. Personal and Academic rank:** Mohamed Tarnini, Associate Professor, full time at Beirut Arab University (ABET Accredited)

(Electric Power and Machines Program Coordinator and Coordinator for ABET unit)

Address	Aramoun (Wazi street). Bayoud building 1 st floor.
Contact	03-730409 E-Mail m.tarnini@bau.edu.lb mohtarni@hotmail.com .
Date of birth	1 July 1969
Status	Married – 4 kids

2. Education: Degrees, discipline, institution and date:

Ph.D., Electrical Engineering, (power and control department) Beirut Arab University 2010
M.S., Electrical Engineering, Beirut Arab University 2004
B.S., Electrical Engineering, Beirut Arab University, 1994

3. Academic experience

- Beirut Arab University, Associate Professor, 2011- present, full time
- Hariri Canadian University, Assistant Professor, 2004- 2011

4. Nonacademic experience

- Water International Company Manager of Electromechanical department 1998- 2012
- Senior Engineer in Electromechanical company EMAC in Abu Dhabi 1994 – 1998
- Designs and implement a full 5-kVA PV system for his power-machines Lab in BAU Debbie campus.
- Design, study and supervise 500kW on-grid PV solar energy project at Beirut Arab University
- Design and study of 1MW on grid PV system for BAU Tripoli Campus

5. Current membership in professional organizations

- University Accreditation Committee of the Lebanese Ministry of Education
- IEEE, Power Electronic Member
- Order Eng. Lebanese Member
- World Congress of Engineering and Computer Science WCECS Committee Member
- Innovative for Lebanon competition member

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- Lebanese standards institution ENERGY committee member (LIBNOR)

6. Honors and Awards:

IEEE EPEC 1ST place Paper Award Nova Scotia Canada

First-Place Award, A Smart 3 phase induction motor smooth drive, Innovative for Lebanon National Competition (machine and drive track), Rafic Hariri University, May 2018.

2nd place Award, non-coils electronic transformer, in AUB Innovative school's competition May 2007

7. Service activities

- 2015-2017 IEEE industrial electronic reviewer committee
- 2016-2022 Power program coordinator
- 2016-2022 Faculty council member
- 2012 – 2022 Schedule Program Member (BAU)
- 2011 – 2019 Faculty's library Member (BAU)
- 2014 - 2017 Students Activities Member.
- 2015 - 2022 ABET evaluation committee member
- 2012 - 2022 Member of the University's Scientific Research Committee

8. Experience Courses (Graduate and Undergraduate)

- a. Power System
- b. Electric Machines
- c. Introductory courses for renewable energy
- d. Power electronics
- e. Machines and drives courses
- f. Advanced Topics in Renewable Energy
- g. Advanced Topics in Power Electronics

9. Research Interests

- a. Modern drive theory for induction motors and synchronous motors
- b. Harmonic elimination by hybrid active power filter
- c. Design and implementation of all types of converters
- d. Motor drives for BLDC and Stepper motors

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10. References:

- a. Prof. Ali haidar ari@bau.edu.lb (+9613676121)
- b. Prof. Ziad Osman z.osman@bau.edu.lb (+9613836089)
- c. Prof. Nazeh Mobayed nmoubayed@yahoo.com (+9613879956)

11. Rank Link: Associate Professor

<https://www.bau.edu.lb/Staff/engineering/Mohamad-Tarnini/92>

12. Publications

1. Abdallah El Ghaly¹,Mohamad Tarnini¹,Nazih Moubayed² andKhaled Chahine³ “A Filter-Less Time-Domain Method for Reference Signal Extraction in Shunt Active Power Filters” **Energies**, Volume 15, Issue 15 (August-1 2022)
2. Abdallah El Ghaly; Mohamad Tarnini; Nazih Moubayed Khaled Chahine “Hybrid Active Power Filter Using a Filter-Less Extraction Technique” 2022 11th International Conference on Renewable Energy Research and Application (ICRERA)
3. Ziad Bou Sakr, El-Bayeh Claude Tarnini Mohamad “Application in Virtual System Modelling (VSM) of Sensored Pm BLDC Motor Drive Using Two Technologies of Processors PIC16F877A and Arduino Uno R3 “ Vol1/Issue-2 Energy ,Environment and Storage Journal 2021.
4. Nabil Abdel-Karim, Mohamad Tarnini, “Design of a Low Cogging Torque Axial Flux Multilayer Permanent Magnet Synchronous Machine for Wind Turbines Applications”. International Journal for Renewable Energy Research Vol.8, No.3, September, 2018
5. “Simulation of Leakage current and THD Compensation in a Large PV system” International Journal of Applied Engineering Research ISSN 0973-4562 Volume 12, Number 19 (2017) pp. 8602-8608
6. “Microcontroller Based Low Power Three Phase Induction Motor Frequency Drive” International Journal of Applied Engineering Research ISSN 0973-4562 Volume 11, Number 8 (2016) pp 6029-6034
7. "Simple Active Harmonics Eliminator for Non-linear Single Phase Loads" International Journal of Applied Engineering Research ISSN 0973-4562 Volume 11, Number 8 (2016) pp 6029-6034
8. “New Series Active Power Filter for Computers Loads and Small Non-Linear Loads” Author: Mohamed Tarnini Journal: Lecture Notes in Engineering and Computer Science Year: 2009 Vol: 2178 Issue: 1 Pages/record No.: 545-549
9. Simplified Active Power Filter (presented and awarded from IEEE EPEC Canada Aug. 2010)
10. “New Series and Parallel Active Power Filter for Small Non Linear Loads –Simulation and Experimental Work” Cairo Sep. 2009 ICACTE Volume 2 pp 1123-1134
11. “Series Active Power Filter for Computers Loads and Small Non-Linear Loads”, Vol I WCECS, Oct. 2009, San Francisco, USA
12. New Series Active Power Filter for Small Non Linear Loads –Simulation and Experimental Work” sept. 2009 Lods Poland EPQU’09
13. New SAPF for Computers Loads and Small Non-Linear Loads Journal Lecture Notes in Engineering and Computer Science Issn: 20780958 EIssn: 20780966 (2010) Volume: 2178
14. “New SAPF for small non-linear loads simulation and experimental work” Electrical and Electronics Engineering, 2009. ELECO 2009. International Conference 5-8 Nov. 2009 p:I-360 - I-363 ISBN: 978-1-4244-5106-7 -18 December 2009

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15. “Microcontroller Based Single Phase Inverter” Tarnini M.Y Mediterranean Microwave Symposium (MMS), 2013 13th Saida Lebanon 2013
16. “Harmonic Filtration by Current Injection and Shunt Capacitors Technique Tarnini, M.Y.
17. “Electric Power and Energy Conversion Systems” (EPECS), 2013 3rd International Conference Turkey Istanbul
18. “Microcontroller Based PMDC Motor Control for Driving 0.5KW Scooter” M.Tarnini PEMC IEEE 2014 Antalya-Turkey Power Electronics and Motion Control Conference and Exposition (PEMC), 2014 16th International
19. “Analytical Estimation in APF Sizing for Networks of Analogous Loads” M.Tarnini, Alaa Abdallah, Palermo Italy 4TH International IEEE, ICRERA 2015
20. “Fast and Cheap Stepper Motor Drive” M.Tarnini, Palermo Italy 4TH International IEEE, ICRERA 2015

11. Professional development activities in the last five years

- IEEE-ICRERA2022- Outstanding paper Award-Istanbul Turkey
- IEEE EPEC Paper Award Nova Scotia Canada
- World Congress of Engineering and Computer Science WCECS Committee Member
- Producing an artificial pure sin-wave Inverter sale in Lebanese market
- designs and implement a full 5 kVA PV system for power-machines Lab in BAU Debbieh campus.
- Design, study and currently supervise the 500kW on-grid PV solar energy project at Beirut Arab University