

# About BARSEKH-ONJI

DSc. M.EEng. DIRCOM

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## Biography

Dr. Aboud Barsekh-Onji holds a B.Eng. in Electrical Power Systems, an M.Sc. in Electrical Engineering, an M.Sc. in Communication Management, and a Doctor of Science in Administrative Sciences, Cum Laude (IPN, Mexico). He works at the intersection of power systems engineering, computational intelligence, and institutional governance. His research has two main threads: the first is technical — hybrid metaheuristic models (PSO, fuzzy logic, clustering, many-objective evolutionary computation) applied to electricity markets and energy dispatch; the second is institutional — AI and agent-based simulation to diagnose structural failures in public administration, with a focus on building intelligent bureaucracy. He has published articles, books, and book chapters with internationally recognized publishers. Currently, he serves as Professor-Researcher at Universidad Anáhuac México and as DIRCOM at the Embassy of the State of Qatar in Mexico. He is also a geopolitical analyst across media in Mexico, Latin America, and Spain, covering energy, technology, and geopolitics from a technical and strategic perspective. (<https://orcid.org/0009-0004-5440-8092>)

## Education

Program	Institution/Board	Year
<b>DSc.</b> (Docotrate in Sciences)	Instituto Politécnico Nacional <i>Mexico City, México</i>	2025
<b>M.C.</b> (Master's degree in Communication Management) C.P. 15192274	Universidad tecnológica de México <i>Mexico City, México</i>	2021
<b>M. EEng.</b> (Master's degree in Electrical Engineering) C.P. 13610643	Aleppo University, Faculty of Elec. Engin. <i>Aleppo, Syria</i>	2012
<b>EEng.</b> (Electrical Power System Eng.) C.P. 12793049	Aleppo University, Faculty of Elec. Engin. <i>Aleppo, Syria</i>	2009

## Professional Experiences

- Full Professor**  
**Faculty of Engineering**  
Aug 2023 - Today  
*Universidad Anáhuac México*
  - Full Professor of **Artificial Intelligence, Machine & Deep Learning and Simulation**
  - Mechatronic engineering, Industrial engineering and Engineering Management*
  - Language(used): Python, MATLAB & Simulink
- DIRCOM (Director of Communications)**  
**Communication Department**  
Feb 2019 - Today  
*Qatar Embassy in Mexico*
- Editorial Board Member - Peer Reviewer**  
**Elsevier, Inc.**  
Jul 2021 - Today  
*Elsevier, Inc.*
  - journal, Energy Conversion and Management, ISSN: 0196-8904
  - journal, Computational Economics, ISSN: 1572-9974
  - journal, Computer and Electrical Engineering, ISSN: 0045-7906
- Analyst**  
**Radio and TV**  
Feb 2020 - Today  
*Several Mexican and European Media*
  - Radio Joya 93.7 FM, Radio Centro, Milenio TV, Imagen TV
- Associate Professor**  
**Faculty of Electrical Engineering**  
2010 - 2012  
*Aleppo University*

## Investigation Projects and Publications

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- Arabian Journal for Science and Engineering (JCR-Scopus-Elsevier-Springer)** 2025  
*King Fahd University of Petroleum and Minerals*  
o Paper: 'Hybrid Modeling for Electricity Prices: Fuzzy Subtractive clustering with Particle Swarm Optimization', ISSN: 2193-567X, DOI: 10.1007/s13369-025-10538-7
- Urban Governance Journal (Scopus-Elsevier)** 2025  
*Shanghai Jiao Tong University*  
o Paper: 'Advancing smart public administration: Challenges and benefits of artificial intelligence', ISSN: 2664-3286, DOI: 10.1016/j.ugj.2025.06.003
- Discover Energy (Scopus - Springer)** 2025  
*Springer Nature*  
o Paper: 'Optimizing Mexico-US cross-border electricity trade with high renewable penetration', ISSN: 2730-7719, DOI: 10.1007/s43937-025-00115-2
- Communications in Computer and Information Science (Scopus-Springer)** 2025  
*Springer Nature*  
o Paper: 'Intelligent Simulation of Electricity Prices in Mexico: Fuzzy Clustering and Particle Swarm Optimization.', DOI: 10.1007/978-3-031-97913-2-6
- Tirant plural editorial** 2025  
*Spain-Mexico*  
o Book 'Energía: Sistemas de gestión y eficiencia empresarial' (Energy: Management Systems and business efficiency), ISBN: 978-84-1081-100-3
- Mercados y Negocios Journal (Scopus-Elsevier)** 2025  
*University of Guadalajara*  
o Consumer Happiness in the Purchase of Electric Vehicles: a Fuzzy Logic Model, DOI: <https://doi.org/10.32870/myn.vi54.7776>
- Journal of Research and Development** 2023  
*ECORFAN - Spain*  
o Use FACTS elements to improve energy exchange between countries in response to the high penetration of variable renewable energy, DOI: 10.35429/JRD.2023.24.9.15.23
- Instituto Politécnico Nacional** 2024  
*Escuela Superior de Comercio y Administración*  
o Macrostrategic Governmental Model for the Integration of Renewable Energy Sources Provided by Private Initiatives into Mass Electricity Generation in Mexico
- Aleppo University Research Journal** 2010  
*Engineering Sciences Series*  
o A New Technology to Accelerate the Start-up of the Steam Mehardeh Station by Using the Thermal Tracking System with Electric Heaters - ISSN 2789-9594
- Aleppo University Research Journal** 2009  
*Engineering Sciences Series*  
o The reduction of voltage surges caused by the Ferranti phenomenon in high and very high voltage networks through the use of SVC static compensators - ISSN 2789-9594

## Courses Taught

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- Machine Learning** 2024 - Today  
*Anahuac University, Faculty of Enineering*  
o Designed and delivered a graduate-level course focusing on algorithm design, complexity analysis, and optimization techniques.  
o Genetic Algorithms, Particle Swarm Optimization Algorithm (PSO), Multi-objective Particle Swarm Optimization Algorithm (MOPSO)
- Fundamentals of artificial intelligence** 2024 - Today  
*Anahuac University, Faculty of Enineering*

- o Includes: fuzzy logic, supervised and unsupervised learning algorithms, optimization using genetic algorithm and Particle

### **Artificial intelligence in industry**

2024 - Today

Anahuac University, Faculty of Engineering

- o Includes: General approach to supervised and unsupervised learning algorithms, optimization using genetic algorithm and Particle

### **Technical Skills**

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- o Programming Language: C, C++, MATLAB, Simulink, Python
- o Web Technology: HTML, XML, Php
- o Database System: phpMyAdmin, Mysql, IBM Cognos Analytics, Google Analytics
- o Tools: Latex, Adobe Dreamweaver, Microsoft Office
- o Electrical Power Systems Simulation: E-Tap, SimPowerSystem

### **Languages**

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- o Spanish (%100), French (%70), Arabic (%100), English (%70)

### **Declaration**

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I do hereby declare that all the details furnished above are true to the best of my knowledge and belief.

Place: Mexico City, Mexico

**BARSEKH-ONJI Aboud**

Date: May 7, 2026