Ibrahim A. Farhat, Ph.D

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Education

Sep 2012	PhD degree in Electrical Engineering. Electrical & Computer Engineering Department, Dalhousie University, Halifax-Nova Scotia, Canada.
May 2011	Certificate in University Teaching and Learning, Dalhousie University, Halifax-Nova Scotia, Canada.
March 2003	Master of Applied Science in Electrical Engineering, Electrical & Computer Engineering Department, Concordia University, Montreal-Québec, Canada.
March 1991	BSc. Bachelor of Applied Science in Electrical Engineering, Tripoli University, Electrical & Electronics Engineering Department, Tripoli-Libya.

Employment

Jan 2023- Now	Professor, Electrical & Computer Engineering Department, Faculty of Engineering- Al-Asmarya University, Zliten-Libya.
April 2021- Now	Dean, Faculty of Engineering- Al-Asmarya University, Zliten-Libya.
Jan 2019- Now	Associate Prof, Electrical & Computer Engineering Department, Faculty of Engineering- Al-Asmarya University, Zliten-Libya.
Aug 2014-Apr 2018	Dean, Faculty of Engineering- Al-Asmarya University, Zliten-Libya.
Jan 2015-Jan 2019	Assistant Prof, Electrical & Computer Engineering Department, Faculty of Engineering- Al-Asmarya University, Zliten-Libya.
June 2014-Jan 2015	Lecturer, Electrical & Computer Engineering Department, Faculty of Engineering- Al-Asmarya University, Zliten-Libya.
Jan 2013-June 2014	Lecturer, Electrical & Computer Engineering Department, Faculty of Engineering- Almergib University, AlKhoms-Libya.
May 2011-Sep 2012	Lecture, Electrical & Computer Engineering Department, Dalhousie University, Halifax-Nova Scotia, Canada.
Sep2007- Mar 2012	Teaching and Research Assistant (PhD Program), Dalhousie University-Electrical & Computer Engineering Department, Halifax-Nova Scotia, Canada.
Sep 2003- Sep 2007	Lecturer, Electrical & Computer Engineering Department, Faculty of Engineering- Almergib University. AlKhoms-Libya.

Sep 2000-Mar 2003	Teaching and Research Assistant (Postgraduate Student), Concordia University, Electrical & Computer Engineering Department, Montreal-Canada. (Master's program sponsored by Waha Oil Company of Libya)
Sep 1996-Sep 2000	Teaching and Research Assistant, Electrical & Computer Engineering Department, Faculty of Engineering- Almergib University, AlKhoms-Libya.
Jan 1995-Sep 2000	Engineering Specialist, Electrical Section, Engineering Department, Waha Oil Company, Tripoli-Libya.

Training and Courses

- The Certificate of Accomplishment of "Auditors in Quality Assurance and Accreditation" Training Course
- The Certificate of "Planning and Control of Industrial Management" Program
- The Certificate of "Engineering Systems Reliability Techniques and Applications"
- The Certificate of Completion of "The Mechanical and Electrical Equipment in Hazardous Zones" Training Program
- Certificate in University Teaching and Learning
- The Certificate of Achievement of the "Microsoft and Windows Operating Systems" Workshop
- The Completion Certificate of the "Development of the Presentation and Public Speaking skills" Course
- The Certificate of the "Financial Literacy in Canada" Program
- Erasmus+Wheel Training course: Systemic Governance
- Erasmus+Wheel Training course: ICTs & Infrastructure
- Others

Summary of Skills

- Excellent command of English language (speaking, reading and writing)
- Expert knowledge of Microsoft Office.
- Fluency in coding languages
- Systems administration
- Spreadsheets
- Email management

- Familiarity with various programming languages, including C, C++, MATLAB, and FORTRAN
- Sound knowledge of user interface design principles, software architecture, design patterns as well as Simulink concepts
- Ability to design, code, test, debug, modify, document and maintain programs, and deliver quality product within deadline
- Good understanding of Project Management tools and software
- Team leadership experience; ability to teach and mentor, flexibility, risk-taking, team building and time management
- Effective interpersonal communication; written communication, active listening, constructive criticism
- Management skills; decision-making, project planning, task delegation, team communication, team leadership
- Problem-solving skills; attention to detail, collaboration, communication, patience, research
- Time management skills; delegating tasks, focus, goal setting, organization, prioritization

Research Interests

- Electrical power system operations and planning
- Electrical power system protection
- Application of heuristic techniques in electrical power systems
- Application of artificial intelligence in electrical power systems
- Power system analysis and optimization.
- Renewable electrical energy
- Environmental aspects of power systems
- Electrical power system economics
- Teaching and learning in higher education

Editorial Review

A reviewer and referee for a number of journals, transactions and conferences, including:

- International Journal of Electrical Power and Energy Systems
- IET Generation, Transmission & Distribution

- International Journal of Engineering and Information Technology (IJEIT)
- 24th Canadian Conference on Electrical and Computer Engineering - IEEE CCECE 2011
- 25th Canadian Conference on Electrical and Computer Engineering - IEEE CCECE 2012
- 4th Conference on Engineering and Technical Sciences (CEST-2021).
- Others.

Reference

- Dr. H. Aly, Ph.D.
  Mathematics and Statistics Department, Acadia University
  Email: *Hamed.Aly@acadiau.ca* Tel: +1 902 585 1159
  Room 121, 12 University Avenue, Huggins Science Hall, Wolfville, NS B4P 2R6, Canada.

- Dr. B. Jomaa, Ph.D.
  Department of Electrical and Electronic Engineering, Tripoli University
  Email: *bashjomaa@gmail.com* Tel: +218 91 354 2834 (Viber)
  High Voltage Engineering-Building, Tripoli University, Tripoli, Libya.

- Dr. A. Albakosh, Ph.D.
  Electrical and Computer Engineering Department, Almergib University
  Email: Aalbkosh@elmergib.edu.ly Tel: +218 91 725 5921
  Faculty of Engineering, Electrical Engineering Building, Alkhoms, Libya

Publications:

- Google Scholar: https://scholar.google.com.ly/citations?user=aWDvB14AAAAJ&hl=en

- Books

[1] I.A. Farhat, Economically and Environmentally Optimized Power System Operations, New York, USA: LAP LAMBERT Academic Publishing & Co. KG Saarbrucken, Germany, 2012.

[2] I.A. Farhat, Fault Diagnosis in Electric Power Transmission Systems, Balti, Republic of Moldova: Noor publishing, 2017.

- Journal and Conference papers

[3] I.A. Farhat and M.E. El-Hawary, "Optimization methods applied for solving the short-term hydrothermal coordination problem," Electr. Power Syst. Res., vol. 79, pp. 1308-1320, 9. 2009.

[4] I.A. Farhat and M.E. El-Hawary, "Interior point methods application in optimum operational scheduling of electric power systems," Generation, Transmission & Distribution, IET, vol. 3; 3, pp. 1020-1029, 2009.

[5] I.A. Farhat and M.E. El-Hawary, "Short-term hydro-thermal scheduling using an improved bacterial foraging algorithm," in Electrical Power & Energy Conference (EPEC), 2009 IEEE, pp. 1-5, 2009.

[6] I.A. Farhat and M.E. El-Hawary, "Modified bacterial foraging algorithm for optimum economic dispatch," in Electrical Power & Energy Conference (EPEC), 2009 IEEE, pp. 1-6, 2009.

[7] I.A. Farhat and M.E. El-Hawary, "Dynamic adaptive bacterial foraging algorithm for optimum economic dispatch with valve-point effects and wind power," Generation, Transmission & Distribution, IET, vol.4, pp. 989-999, 2010.

[8] I.A. Farhat and M.E. El-Hawary, "Fixed-head hydro-thermal scheduling using a modified bacterial foraging algorithm," Electrical Power & Energy Conference (EPEC), 2010 IEEE.

[9] I.A. Farhat and M.E. El-Hawary, "Scheduling of Variable-Head Hydro-Thermal Generation Using an Enhanced Bacterial Foraging Algorithm," 24th Canadian Conference on Electrical and Computer Engineering, 2011. CCECE 2011.

[10] I.A. Farhat and M.E. El-Hawary, "Short-Term Coordination of Hydro-Thermal Systems with Cascaded Reservoirs Using Bacterial Foraging Algorithm," 24th Canadian Conference on Electrical and Computer Engineering, 2011. CCECE 2011.

[11] I.A. Farhat and M.E. El-Hawary, "Short-term hydro-thermal scheduling with environmental considerations using bacterial foraging algorithm," 24th Canadian Conference on Electrical and Computer Engineering, 2011. CCECE 2011.

[12] I.A. Farhat and M.E. El-Hawary, "Bacterial Foraging Algorithm for Optimum Economic-emission Dispatch," Electrical Power & Energy Conference (EPEC), 2011 IEEE.

[13] I.A. Farhat and M.E. El-Hawary, "Multi-Objective Short-Term Hydro-Thermal Scheduling Using Bacterial Foraging Algorithm," Electrical Power & Energy Conference (EPEC), 2011 IEEE.

[14] I.A. Farhat and M.E. El-Hawary, "Short-Term Hydro-Thermal Generation Scheduling using a Modified Bacterial Foraging Algorithm," submitted to IEEE Transactions on Power Systems.

[15] I.A. Farhat, "Ant Colony Optimization for Optimal Distributed Generation in Distribution Systems," International Journal of Computer, Information, Systems and Control Engineering, vol: 7, pp. 461-465, no.8, 2013.

[16] I.A. Farhat, "Optimal Dynamic Economic Load Dispatch Using Artificial Immune System," International Journal of Computer, Information, Systems and Control Engineering, vol: 8, pp. 75-81, no.1, 2013.

[17] I.A. Farhat and M. BinHasan, "Application of Support Vector Machines in Fault Detection and Diagnosis of Power Transmission Lines," International Conference on Power Engineering and Technology, vol: 2, pp. 141-147, no.6, 2014.

[18] I.A. Farhat and Abdullah O. Hawal, "Distribution Generation Optimal Size and Placement using an Enhanced Sequential Quadratic Programming," Al-Asmarya Journal for basic and applied sciences, vol: 1, pp. 69-83, no.1, June 2016.

[19] I.A. Farhat and A. O. Albakosh, "Multi-Objective Optimum Economic-Emission Dispatch Considering the Environmental Aspects," Journal of Humanities and Applied Science (JHAS), Vol 28. , No. 1, June 2016.

[20] I.A. Farhat and A. O. Albakosh, "Stability Analysis of Controlled DC Motor," The International Journal of Engineering and Information Technology (Ijeit), Vol 3. , No. 1, Dec 2016.

[21] I.A. Farhat and M. BinHasan, "Fault Diagnosis, Testing and Responses of Induction Motor Systems," Al-Asmarya Journal for basic and applied sciences, vol: 2, pp. 69-83, no.30, June 2017.

[22] I.A. Farhat, "An enhanced JAYA Algorithm for Optimum Thermal-Wind Power System Economic Dispatch with Valve-Point Effects," The International Journal of Engineering and Information Technology (Ijeit), Vol 6. , No. 1, Dec 2019.

[23] I.A. Farhat, "A Dynamic Bacterial Foraging Search Algorithm for Maximum Loadability of Power Systems," Third International conference technical Science, National Board for Technical and Vocational Education, 28-30 November 2020.

[24] I.A. Farhat and Abdullah O. Hawal, "Optimized Maximum Loadability of Power Systems using an Enhanced Dynamic JAYA Algorithm," Third Conference for Engineering Sciences and Technology (CEST-2020), 1-3 December 2020.

[25] I.A. Farhat and Abdullah O. Hawal, "Optimized Maximum Loadability of Power Systems using an Enhanced Dynamic JAYA Algorithm," International Journal of Advances in Signal and Image Sciences 6 (2), 1-7, 3 December 2020.

[26] I.A. Farhat M. M. Sofia and A.S. Kagilik, "Investment Promotion in Renewable Energy in Libya; Vision & Methodology," AIUE Proceedings of the 2nd Energy and Human Habitat Conference, pp. 1-6, 26 July 2021.

[27] I.A. Farhat, "A Modified Dynamic Bacterial Foraging Algorithm for an Enhanced Power System State Estimation," The 4th conference on Engineering Science and Technology-CEST-2021, pp. 461-469, 14-16 December 2021.

[28] I.A. Farhat, "A Modified Dynamic Bacterial Foraging Algorithm for an Enhanced Power System State Estimation," Al-Asmarya Journal for basic and applied sciences, vol: 6, no:5, pp. 466-478, Dec 2021.

[29] I.A. Farhat, "An Improved Power System State Estimation using a Dynamically Adapted JAYA Algorithm," Al-Asmarya Journal for basic and applied sciences, vol: 6, no:5, pp. 136-144, Dec 2022.