Hassan Al-Saadi

PhD in Electrical Engineering

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1. **Objective:** Looking forward to leverage my work and leadership experience in design, maintenance and site engineering with highly reputed companies.

2. Personal Information:

Date of Birth: 3rd of April-1985, Iraqi, male and single.

3. Education:

PhD degree in Electrical and Electronic Engineering, University of Adelaide, SA, Australia, 2018.

Thesis title "*Probabistic Hosting Capacity and Risk Analysis for Distribution Networks*".

MSc degree in Electrical and Electronic Engineering, University of Technology, Baghdad, Iraq, 2010.

BSc degree in Electromechanical Engineering, University of Technology, Baghdad, Iraq, 2007.

Work Experience:

- a) Private Own Workshop for Electrical Generators and Devices (General Maintenance) Baghdad / Iraq (2006-2013)
 - Troubleshoots, repairs, maintains and overhauls diesel engines power generation unit by using technical data such as OEM and technical drawings.
 - Hands-on repairs and overhauls of most of diesel engines such as Cummins, Perkins, CAT and Kubota.
 - Identifies and orders spare parts, supplies, tools and equipment needed in the repair, maintenance and overhaul of diesel engine power generation units.
 - Utilize diagnostic equipment to identify faults and defects.
 - The UPS maintenance, manufacturing the current inverter and frequency converter reach to 5kW, 200kHz used as electrical motor drive, Induction Heating (IH) application and other.
 - Manufacturing and coiling electric transformers, motors and head generators.
 - Manufacturing the protection systems for various types of electric generators including alarm system and auto excitation system.
 - Designed AVR (Automatic Voltage Regulator) to provide a stable voltage for various types of electric generators, manufacturing voltage stabilizer and sequencer (multitimer).
- b) <u>Baghdad Company for Trading and Industrial Equipment Manufacturing and Agriculture Equipment Ltd.</u> <u>Iraq/Baghdad/Sinak/Opp. Industrial Bank (2003-2007)</u>
 - Routines in operation and production the poultry requisites factory including many functions in the Mechanical side included (operator of the various kinds of turnery machines and treated with material welding in different methods, in addition to dealing with metals thermally for hardening)

5. Academic Experience:

- a) School of Electrical and Electronic Engineering, University of Adelaide, Australia (2015-2018)
 - Tutor, lab facilitator, exam marker, exam invigilator for courses (*Electrical Energy Conversion and Electrical Energy Systems, Electric Power Systems, Power Quality and Condition Monitoring and Electric Drive Systems*).
 - Research Assistant.
- b) Mechanical Engineering, Kufa University, Najaf / Iraq (2013)
 - External Instructor for course (AC machine), 4th year.
- c) Electrical Power Engineering Techniques, Al-Mamoun University College, Iraq (2012)
 - Roles: a lecturer for electrical power machine course, Reliability and Quality System and Electrical Equipment Installation.

6. Activities and Awards:

I was the organizer, invitation sender, chairman of the first energy forum titled "الطاقة: الواقع و الأفاق" Electric Energy, current situation and what\s on the horizon in Islamic University, Najaf, Iraq in 2011. Speakers were the manager of Electric Distribution Com. in Najaf, engineering supervisor at National Dispatch and Control Centre in Baghdad and a lecturer from Al-Mamoun University College in Baghdad.

AWARDS			
Research Travel Scholarship from AGC. University of Adelaide to University of Applied	AUD3000	2018	Australia

Sciences Upper Austria, Wels, Austria.			
EEE Travel Grant from school of electrical and Electronic Engineering, University of Adelaide.	AUD4000	2017	Australia
The Walter and Dorothy Duncan Trust award, University of Adelaide.	AUD1000	2017	Australia
The Walter and Dorothy Duncan Trust award. University of Adelaide.	AUD1000	2018	Australia

7. Training:

Summer vacation, State Company for Vegetable Oils Industry- Baghdad, Iraq (2006), Academic Teaching and Training Development Center, University of Kufa, Najaf, Iraq (2013), Electrical Power Distribution Course Level 1 & 2 Course (2017), General Academic English and Advanced English Courses, ELC, Australia (2013 & 2014), Business Concepts for Life Scientists, University of Adelaide, Australia, (2015), Intermediate Statistics, University of Adelaide, Australia (2016).

8. Skills:

Language	• Fluent in the English language, (Mother language is Arabic)
Computer knowledge	 Windows, Microsoft Office 365 (Outlook, Word, Excel, onedirve,etc), Microsoft Viso, MathCAD, Matlab, Multism (Electrical workbench) and ANSYS, OpenDSS, Web design, Docear, Electrical Power AutoCAD. Designing and planning for distribution of electric power for houses or buildings in AutoCAD Electrical software. Autodesk Revit Electrical Systems for placing devices, lighting fixtures, and electrical equipment in a project. Oob electrical plugin for SketchUp. OpenDSS (excellent), ETAP, PSIM and DIgSILENT.
Health and Safety	 Attended the Induction/workshop for Health, Safety & Wellbeing in The University of Adelaide for the years, 2016 and 2017. Self-studied course in Hazard Identification, Risk Assessment and Risk Control.
Project Management	 Good at Preventative Maintenance, Training, Preventative Maintenance, Safety, Records Retention, Project Support, Complete other tasks as required by the Assistant or Power Plant Manager.
Interpersonal Skills	 Team Leadership with good skills in face-to-face interactions and email correspondences. Good at Time Management.

- 9. Selected Reviewers in: IEEE Transaction on Smart Grid, IEEE Transaction on Industrial Informatics, Applied Energy.
- **10. Memberships:** IEEE Power & Energy Society, Engineering Australia, EESA, Technical Society of Engineers Australia, Iraq Energy Forum.

11. Power Plant Visit:

Scientific visit toured by Idaho Power Company personals (USA, 2018), Collaboration with AS Power Network for simulating large distribution network using OpenDSS (South Australia, 2015), Short technical train for SCADA system (National Dispatch and Control Centre, Baghdad 2012), Organizer and demonstrator between Najaf Gas Power Plant and university performing a series of scientific tours for undergraduates students of Islamic University (2012 & 2013).

12. Publications: one journal paper in IEEE Transaction on Industrial Informatics, plus four IEEE conferences. (simply click my name <u>Hassan Al-Saadi</u> in google scholar)

13. References:

- Prof. Rastko Zivanovic (School of EEE, University of Adelaide, Australia, rastko.zivanovic@adelaide.edu.au)
- <u>Dr. Said Al-Sarawi</u> (School of EEE, University of Adelaide, Australia, said.al-sarawi@adelaide.edu.au)
- <u>Dr. Dmitry Chaschin</u> (National Technical Manager for Rotating Machine Field Service 2004-2015, ABB International Inc, Australia. dchaschi@bigpond.net.au)
- 2. David Vowles (Research Engineer, Power Systems Dynamics Group, University of Adelaide, David Vowles @adelaide.edu.au)