

# RESUME

UTM-PROTON Future Drive Laboratory, Faculty of Electrical Engineering, Universiti Teknologi  
Malaysia, 81310 Skudai, Johor Bahru, MALAYSIA  
MOBILE PHONE: +60136033176  
E-MAIL: [m\\_jannatyy@yahoo.com](mailto:m_jannatyy@yahoo.com)  
[jmohammad6@live.utm.my](mailto:jmohammad6@live.utm.my)

## MOHAMMAD JANNATI

PERSONAL DATA
<ul style="list-style-type: none"><li>• Name: <i>Mohammad</i>, Family name: <i>Jannati</i></li><li>• Born in 14 July 1984</li><li>• Married</li><li>• Nationality: Iranian</li></ul>

RESEARCH INTERESTS
<ul style="list-style-type: none"><li>• Control of motor drives</li><li>• Power electronics</li><li>• Modeling and analysis of electrical machines</li></ul>

EDUCATION	
Sep 2011 - Present	UTM University, Skudai- JB-Malaysia PHD in Power Electronic engineering
Sep 2008 - Sep 2010	Guilan University, Guilan-Iran MSc in Power engineering
Sep 2002 - Feb 2008	Mazandaran University, Mazandaran-Iran BSc in Power engineering
Sep 1998 - Jul 2002	Sampad high School (for superior students), Gorgan-Iran High School Diploma

AWARDS, MEMBERSHIPS AND FELLOWSHIPS	
Nov 2013	Best Paper Award (in the field of Multiphase Drives) of the 39th Annual Conference of the IEEE Industrial Electronics Society (IECON2013)
Jan 2014-Jan 2015	UTM International Doctoral Fellowship
Jan 2012-Present	Member of the Power Electronics and Drives Research Group (PEDRG), Department of Energy Conversion, UTM
Sep 2014-Present	Member of Universal Association of Computer and Electronics Engineers (UACEE)
Jan 2012-Present	Member of the UTM-PROTON Future Drive Laboratory (UPFDL)
Jun 2013	Member of the TPC for 2013 Electrical Engineering Research Colloquium (EERC)
Sep 2014-Present	Senior member of the International Association of Computer Science and Information Technology (IACSIT)
Sep 2014-Present	Member of the Engineering and Scientific Research Groups (ESR Groups)

Sep 2014-Present	Member of the International Association of Engineers (IAENG)
Sep 2014-Present	Member of DAAAM International
Oct 2014-Present	Member of Blue Eyes Intelligence Engineering & Sciences Publication
Oct 2014	International Scientific Committee member in 2015 International Conference on Artificial Intelligence and Control Automation (AICA2015) <a href="http://www.aica2015.org/com.htm">http://www.aica2015.org/com.htm</a>
Oct 2014	Member of the TPC for 2015 International Conference on Intelligent Materials and Manufacturing Engineering (IMME2015) <a href="http://www.imme2015.org/com.htm">http://www.imme2015.org/com.htm</a>
Sep 2014-Present	Member of learn engineering <a href="http://learnengineering.in/Members/">http://learnengineering.in/Members/</a>
Oct 2014	Member of International Conference on Advances in Electronics and Electrical Engineering <a href="http://www.icaeee.org/index.php/editorial-board">http://www.icaeee.org/index.php/editorial-board</a>
Oct 2014	Member of ICOME. 2014 <a href="http://icome2015.org/index.php/editorial-board">http://icome2015.org/index.php/editorial-board</a>
Oct 2014	Member of the TPC for International Scientific Academy of Engineering & Technology (ISAET) <a href="http://www.isaet.org/members.php?page=20">http://www.isaet.org/members.php?page=20</a>
Oct 2014	Member of the TPC for International Conference on Power and Mechanical Engineering (ICPME2015) <a href="http://www.icpme2015.org/com.htm">http://www.icpme2015.org/com.htm</a>

<b>ACADEMIC SERVICE</b>	
Editorial Board Member:	<ul style="list-style-type: none"> <li>• International Journal of Engineering &amp; Technology Research <a href="http://www.iaster.com/journaldetail.php?Name=IJETR">http://www.iaster.com/journaldetail.php?Name=IJETR</a></li> <li>• International Journal of Research in Electrical &amp; Electronics Engineering <a href="http://www.iaster.com/journaldetail.php?Name=IJREEE">http://www.iaster.com/journaldetail.php?Name=IJREEE</a></li> <li>• ACADEMIC JOURNALS ONLINE (AJO) <a href="http://www.academicjournalonline.org/dashboard/editorial_engg">http://www.academicjournalonline.org/dashboard/editorial_engg</a></li> <li>• International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering (IJAREEIE) <a href="http://www.ijareeie.com/about-us/editorial-board">http://www.ijareeie.com/about-us/editorial-board</a></li> <li>• Universal Journal of Electrical and Electronic Engineering <a href="http://www.hrpub.org/journals/jour_editorialboard.php?id=49">http://www.hrpub.org/journals/jour_editorialboard.php?id=49</a></li> <li>• International Journal of Electrical and Electronic Science <a href="http://www.aascit.org/journal/editorial?journalId=915">http://www.aascit.org/journal/editorial?journalId=915</a></li> <li>• International Journal of Advanced Research in Computer Science and Software Engineering (IJARCSSE) <a href="http://www.ijarsse.com/editorialBoard.php">http://www.ijarsse.com/editorialBoard.php</a></li> <li>• American International Journal of Research in Humanities, Arts and Social Sciences <a href="http://iasir.net/aijrhassboardmembers.html">http://iasir.net/aijrhassboardmembers.html</a></li> </ul>

- International Conference on Advances in Computer Science and Information Technology  
<http://www.icacsit.org/index.php/editorial-board>
- International Journal of Research in Computer Applications & Information Technology  
<http://www.iaster.com/journaldetail.php?Name=IJRCAIT>
- International Association of Scientific Innovation and Research (IASIR)  
<http://www.iasir.net/boardmembers.html>
- International Conference on Agriculture, Biological and Environmental Science (ICABES. 2014)  
<http://www.icabes.org/index.php/editorial-board>
- International Conference on Advances in Electronics and Electrical Engineering  
<http://www.icaeee.org/index.php/editorial-board>
- International Journal of Engineering, Business and Enterprise Applications (IJEBEA)  
<http://iasir.net/ijebeboardmembers.html>
- International Conference on Advances in Mechanical, Production and Industrial Engineering  
<http://www.icampie.org/index.php/editorial-board>
- International Journal of Electrical, Electronics and Mechanical Controls (IJEEMC)  
[http://www.ijeemc.com/index.php?option=com\\_content&view=article&id=48&Itemid=18](http://www.ijeemc.com/index.php?option=com_content&view=article&id=48&Itemid=18)
- American International Journal of Research Formal, Applied & Natural Sciences  
<http://iasir.net/aijrfansboardmembers.html>
- International Journal of Software and Web Sciences (IJSWS)  
<http://iasir.net/ijswsboardmembers.html>
- International Journal of Emerging Technologies in Computational and Applied Sciences (IJETCAS)  
<http://iasir.net/ijetcasboardmembers.html>
- Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd.  
<http://www.blueeyesintelligence.org/committee.php>
- Scientific Board of Computer, Electrical & Electronic Engineers  
[http://www.iieng.org/editorial\\_board.php?cid=3Mr](http://www.iieng.org/editorial_board.php?cid=3Mr)
- International Journal of Management and Humanities

	<p><a href="http://www.ijmh.org/editor.php">http://www.ijmh.org/editor.php</a></p> <ul style="list-style-type: none"> <li>• International Journal of Academic Research in Education and Review <a href="http://www.academicresearchjournals.org/IJARER/Editors.htm">http://www.academicresearchjournals.org/IJARER/Editors.htm</a></li> <li>• SAS Publisher</li> </ul>
Reviewer Panel Member:	<ul style="list-style-type: none"> <li>• International Journal of Informative &amp; futuristic Research (IJIFR) <a href="http://www.ijifr.com/editorialboard.aspx">http://www.ijifr.com/editorialboard.aspx</a></li> <li>• International Journal of Computer and Electrical Engineering (IJCEE)</li> <li>• International Journal for Research and Development in Technology (IJRDT) <a href="http://ijrdt.org/reviewers_list.aspx">http://ijrdt.org/reviewers_list.aspx</a></li> <li>• American Journal of Electrical and Electronic Engineering Scientific <a href="http://www.sciepub.com/journal/ajeec/EditorialBoard">http://www.sciepub.com/journal/ajeec/EditorialBoard</a></li> <li>• Scientific Journal of Electrical Engineering (SJEE)</li> <li>• International Journal of Electrical, Electronics and Data Communication (IJEEDC)</li> <li>• International Journal of Electrical and Electronics Engineering Research (IJEEER) <a href="http://www.tjprc.org/page.php?pid=15&amp;page=790">http://www.tjprc.org/page.php?pid=15&amp;page=790</a></li> <li>• International Journal of Scientific &amp; Technology Research (IJSTR)</li> <li>• International Journal of Engineering Research and General Science (IJERGS) <a href="http://www.ijergs.org/research-team">http://www.ijergs.org/research-team</a></li> <li>• Asian Journal of Applied Sciences (AJAS)</li> <li>• International Journal of Electrical, Electronics &amp; Computer Science Engineering (IJEECSE)</li> <li>• Journal of Control Engineering and Technology (JCET) <a href="http://www.vkingpub.com/Journal/JCET/291.html">http://www.vkingpub.com/Journal/JCET/291.html</a></li> <li>• International Journal of Research in Engineering and Technology (IJRET)</li> <li>• American Journal of Electrical and Electronic Engineering <a href="http://www.sciepub.com/journal/AJEEE/EditorialBoard">http://www.sciepub.com/journal/AJEEE/EditorialBoard</a></li> </ul>

	<ul style="list-style-type: none"> <li>• 1st National Conference on Development of Civil Engineering, Architecture, Electricity and Mechanical in IRAN</li> <li>• WSEAS</li> <li>• Asian Journal of Natural &amp; Applied Sciences (AJSC) <a href="http://www.ajsc.leena-luna.co.jp/board.php">http://www.ajsc.leena-luna.co.jp/board.php</a></li> </ul>
Reviewer for International Journals:	<ul style="list-style-type: none"> <li>• IETE Technical Review</li> <li>• PRZEGLĄD ELEKTROTECHNICZNY</li> <li>• ELEKTRIKA</li> <li>• International Journal of Power Electronics and Drive Systems (IJPEDS)</li> </ul>
Reviewer for Technical International Conferences:	<ul style="list-style-type: none"> <li>• The Third International Conference on Technological Advances in Electrical, Electronics and Computer Engineering (TAEECE2015) <a href="http://sdiwc.net/conferences/taeece2015/program-committees/">http://sdiwc.net/conferences/taeece2015/program-committees/</a></li> <li>• 30th Annual IEEE Applied Power Electronics Conference &amp; Exposition</li> <li>• 2014 IEEE International Conference on Power and Energy (PECON 2014)</li> <li>• IEEE Student Conference on Research &amp; Development (SCORED 2014)</li> <li>• 2nd HASSACC 2014 - Virtual Conference Human And Social Sciences at the Common Conference</li> <li>• The 3rd Virtual International Conference on Advanced Research in Scientific Areas (ARSA-2014)</li> <li>• The 2nd Virtual Multidisciplinary Conference (QUAESTI 2014)</li> </ul>

<b>PRESENTATION AT CONFERENCES AND PROFESSIONAL MEETINGS</b>	
2009	“Modeling and Simulation of Three Phase Induction Motor by Using Winding Function Method,” Seminar Presentations at the Department of Electrical Engineering, University of Guilan.
2009	“Vector Control and Speed Estimation of Unbalanced Induction Motor Using Kalman Filter,” 10th Conference on Electrical Engineering of Guilan University.
2010	“Modeling and Vector Control of Unbalanced induction motors (faulty three phase or single phase induction motors),” 1st Conference on Power Electronic & Drive Systems & Technologies (PEDSTC).
2011	“A New Method for Speed Sensorless Vector Control of Single-Phase Induction Motor Using Extended Kalman Filter,” Conf. Proc. Of ICEE.
2013	“Modeling and Speed Estimation of A Faulty 3-Phase Induction Motor by Using Extended Kalman Filter,” 2013 Electrical Engineering Research Colloquium (EERC).
2013	“Using of EKF for Speed Sensorless SVM-DTC in Induction Motor

	at Low Speed,” IEEE Student Conference on Research and Development (SCORED).
2013	“Vector Control of Three-Phase Induction Motor Under Open-Phase Fault,” IEEE Student Conference on Research and Development (SCORED).
2014	“Modeling and Speed Estimation of A Faulty 3-Phase Induction Motor by Using Extended Kalman Filter,” IEEE Symposium on Computer Applications and Industrial Electronics (ISCAIE).
2014	“A Simple Vector Control Technique for 3-Phase Induction Motor under Open-Phase Fault Based on GA for Tuning of Speed PI Controller,” 014 IEEE Conference on Energy Conversion (CENCON 2014).

### RESEARCH EXPERIENCES

- Modeling and vector control of IMs under fault condition (PHD and MSC topic)
- High performance vector control of healthy and faulty IMs
- Fault detection in IMs
- Hybrid Electric Vehicle

### WORK EXPERIENCES

Sep 2011 - Present	Member of the UTM-PROTON Future Drive Laboratory, Faculty of Electrical Engineering, Universiti Teknologi Malaysia, MALAYSIA
Dec 2009 - Apr 2010	Assistant in a Lab Machine, Guilan-Iran
Jun 2009 - Jun 2011	Assistant at ROSHD Electricity Institute (Part-time), Gorgan-Iran
Sep 2009 - Dec 2009	Tutor of Electric Machinery, Guilan-Iran
Jun 2007 - Sep 2007	Internship, Gorgan Electricity Co, Gorgan-Iran (Received Industrial Electrician from Islamic republic of Iran State Techno-Vocational Training Organization)
Sep 2005 - Jan 2005	Tutor of Signals & Systems, Mazandaran-Iran

### PUBLICATIONS

#### Journal papers:

- **Mohammad JANNATI**, Ali MONADI, Nik Rumzi NIK IDRIS, Ahmad Athif MOHD FAUDZI and Frede BLAABJERG, “Modeling and rotor field-oriented control of faulty three-phase induction motor based on GSA for tuning of PI controllers,” *Turkish Journal of Electrical Engineering & Computer Sciences*, (Accepted).
- **Mohammad Jannati**, Seyed Hesam Asgari, Nik Rumzi Nik Idris & Mohd Junaidi Abdul Aziz, “A Novel Method for Vector Control of Three-Phase Induction Motor under Open-Phase Fault,” *ITB Journal*, (Accepted).
- **M. Jannati**, N. R. N. Idris and M. J. A. Aziz, “Speed Sensorless Fault-Tolerant Drive System of 3-Phase Induction Motor Using Switching Extended Kalman Filter,” *TELKOMNIKA Indonesian Journal of Electrical Engineering*. 12(11), 2014.
- **M. Jannati**, N. R. N. Idris and M. J. A. Aziz, “IFOC of Faulty Single-Phase IMs,” *TELKOMNIKA Indonesian Journal of Electrical Engineering*. 12(10), 2014.
- **Mohammad Jannati**, Sajad Abdollahzadeh Anbaran, Nik Rumzi Nik Idris, Mohd Junaidi Abdul Aziz, “A Novel Technique for Vector Control of Single-Phase Induction Motors Based on Rotor Field-Oriented Control,” *TELKOMNIKA Telecommunication*,

- Computing, Electronics and Control* (Accepted).
- M. Jannati, N. R. N. Idris and M. J. A. Aziz, "Indirect Rotor Field-Oriented Control of Fault-Tolerant Drive System for Three-Phase Induction Motor with Rotor Resistance Estimation Using EKF," *TELKOMNIKA Indonesian Journal of Electrical Engineering*, 12(9), 2014.
  - M. Jannati, S. H. Asgari, N. R. N. Idris and M. J. A. Aziz, "Speed Sensorless Direct Rotor Field-Oriented Control of Single-Phase Induction Motor Using Extended Kalman Filter," *International Journal of Power Electronics and Drive Systems (IJPEDS)*, 4(4), 2014.
  - M. Jannati, A. Monadi, N. R. N. Idris and M. J. A. Aziz, "Speed Sensorless Vector Control of Unbalanced Three-Phase Induction Motor with Adaptive Sliding Mode Control," *International Journal of Power Electronics and Drive Systems (IJPEDS)*, 4(3), 2014.
  - M. Jannati, A. Monadi, S. A. Anbaran, N. R. N. Idris and M. J. A. Aziz, "An Exact Model for Rotor Field-Oriented Control of Single-Phase Induction Motors," *TELKOMNIKA Indonesian Journal of Electrical Engineering*, 12(7), 2014.
  - M. Jannati, N. R. N. Idris, M. J. A. Aziz, A. Monadi and A. A. M. Faudzi, "A Novel Scheme for Reduction of Torque and Speed Ripple in Rotor Field Oriented Control of Single Phase Induction Motor Based on Rotational Transformations," *Research Journal of Applied Sciences, Engineering and Technology*, 7(16), 2014.
  - M. JANNATI, A. MONADI, N. R. N. IDRIS, M. J. A. AZIZ and A. A. M. FAUDZI, "Vector Control of Faulty Three-Phase Induction Motor with an Adaptive Sliding Mode Control," *PRZEGLĄD ELEKTROTECHNICZNY*, 89(12), 2013.

#### Conference papers:

- M. Jannati, A. Monadi, G. W. Yen, S. H. Asgari, N. R. N. Idris and M. J. A. Aziz, "A Simple Vector Control Technique for 3-Phase Induction Motor under Open-Phase Fault Based on GA for Tuning of Speed PI Controller," *CENCON 2014*, (Accepted).
- S. H. Asgari, M. Jannati, N. R. N. Idris "Modeling of Three-Phase Induction Motor with Two Stator Phases Open-Circuit," *CENCON 2014*, (Accepted).
- A. Anbaran, M. Jannati, N. R. N. Idris and M. J. A. Aziz, "Rule-Based Supervisory Control of Split-Parallel Hybrid Electric Vehicle," *CENCON 2014*, (Accepted).
- M. Jannati, A. Anbaran, M. I. Alsofyani, N. R. N. Idris and M. J. A. Aziz, "Modeling and RFOC of faulty three-phase IM using Extended Kalman Filter for rotor speed estimation," *In 8th International Power Engineering and Optimization Conference (PEOCO)*, 2014.
- M. I. Alsofyani, N. R. N. Idris, M. Jannati, A. Anbaran, M. I. Alsofyani, and Y. A. Alamri, "Using NSGA II multiobjective genetic algorithm for EKF-based estimation of speed and electrical torque in AC induction machines," *In 8th International Power Engineering and Optimization Conference (PEOCO)*, 2014.
- M. Jannati, S. H. Asgari, A. Monadi, N. R. N. Idris, M. J. A. Aziz, D. Dehghani and A. A. M. Faudzi, "Modeling and Speed Estimation of A Faulty 3-Phase Induction Motor by Using Extended Kalman Filter," *IEEE Symposium on Computer Applications and Industrial Electronics (ISCAIE)*, 2014 (Accepted).
- M. Jannati, S. Anbaran, N.R.N. Idris, M.J.A. Aziz, "A Novel Speed Sensorless SVM-DTC in Induction Motor by Using EKF," *IEEE Student Conference on Research and Development (SCORED)*, 2013 (Accepted).
- M. Jannati, N.R.N. Idris, M.J.A. Aziz, S.H. Asgari, A. Monadi, A.A.M. Faudzi, "A New Method for RFOC of Single-Phase Induction Motor Based on Rotational Transformations," *IEEE Student Conference on Research and Development (SCORED)*,

- 2013 (Accepted).
- M. Jannati, S. Anbaran, N.R.N. Idris, M.J.A. Aziz, "Vector Control of Three-Phase Induction Motor Under Open-Phase Fault," *IEEE Student Conference on Research and Development (SCORED)*, 2013 (Accepted).
  - M. Jannati, N.R.N. Idris, M.J.A. Aziz, A. Monadi, M.F Al-Jaf, A.A.M. Faudzi, "Using of EKF for Speed Sensorless SVM-DTC in Induction Motor at Low Speed," *IEEE Student Conference on Research and Development (SCORED)*, 2013 (Accepted).
  - M. Jannati, N. R. N. Idris and M. J. A. Aziz, "A new method for RFOC of Induction Motor under open-phase fault," *In 39th Annual Conference of the Industrial Electronics Society, (IECON2013)*, Nov. 2013.
  - M. Jannati, N. R. N. Idris and Z. Salam, "A New Method for Modeling and Vector Control of Unbalanced Induction Motors," *IEEE Energy Conversion Congress and Exposition (ECCE2012)*, Sep 2012.
  - M. Jannati, E. Fallah, "A New Method for Vector Control of Unbalanced Induction Motors," *Conf. Proc. Of ICEE*, 2012 (In Persian).
  - M. Jannati, E. Fallah, "A New Method for Speed Sensorless Vector Control of Single-Phase Induction Motor Using Extended Kalman Filter," *Conf. Proc. Of ICEE*, August 2011.
  - M. Jannati, E. Fallah, "Modeling and Vector Control of Unbalanced induction motors (faulty three phase or single phase induction motors)," *1st Conference on Power Electronic & Drive Systems & Technologies (PEDSTC)*, May 2010.

#### Papers under review:

- M. Jannati, N. R. N. Idris and M. J. A. Aziz, "A Simple Vector Control Method Based on Field Oriented Control for Faulty 3-Phase Induction Motor under Open-Circuit Fault," *International Journal of Power Electronics and Drive Systems (IJPEDS)*
- M. Jannati, S. Anbaran, N. R. N. Idris and M. J. A. Aziz, "Modeling and Vector Control of Single-Phase IMs under Open-Phase Fault," *ELEKTRIKA*.
- M. Jannati, N. R. N. Idris and M. J. A. Aziz, "Stator Field-Orientation Speed Control for 3-Phase Induction Motor under Open-Phase Fault," *ELEKTRIKA*.
- M. Jannati, A. Monadi, N. R. N. Idris and M. J. A. Aziz, "Analytical Calculation of RFOC Method in Single-Phase Induction Motor," *International Journal of Electronics*.
- M. Jannati, N. R. N. Idris, "Bi Input-FOC of 3-Phase IM," *Turkish Journal of Electrical Engineering & Computer Sciences*.
- M. Jannati, N. R. N. Idris and M. J. A. Aziz, "FOC-DTC Method for Vector Control of 3-Phase Induction Motor under Open-Circuit Fault," *TELKOMNIKA*.
- M. Jannati, N. R. N. Idris and M. J. A. Aziz, "A Novel Method for Rotor Field-Oriented Control of Single-Phase Induction Motors," *International Journal on Electrical Engineering and Informatics*.
- M. Jannati, N. R. N. Idris, "Switching Vector Control Technique for Fault-Tolerant Control of Induction Motor Drive in Electric Vehicles," *will be submitted to IEEE Transactions*.
- M. Jannati, N. R. N. Idris, "Modeling, analysis and vector control of single-phase induction motors," *will be submitted to COMPEL Journal*.

#### Technical reports

- M. Jannati, E. Fallah, "Vector Control and Speed Estimation of Unbalanced Induction Motor Using Kalman Filter," *10th Conference on Electrical Engineering of Guilan University*, 2009 (In Persian).
- M. Jannti, "Modeling and Speed Estimation of A Faulty 3-Phase Induction Motor by



Using Extended Kalman Filter,” *2013 Electrical Engineering Research Colloquium (EERC)*, 2013.