

## Hussam J. Khasawneh, Ph.D.

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INFORMATION	Assistant Professor Department of Mechatronics Engineering The University of Jordan Amman, 11942 Jordan	<i>Tel:</i> +962-6-535-5000 (ext. 23037) <i>Cell:</i> +962-79-666-7265 <i>Email:</i> h.khasawneh@ju.edu.jo h.khasawneh@gmail.com
RESEARCH INTERESTS	Automotive, energy storage, renewable energy, water-energy nexus, smartgrid, microgrid, distributed generation, vehicle-to-grid.	
EDUCATION	<b>The Ohio State University</b> , Columbus, Ohio USA Ph.D., Electrical and Computer Engineering, 2011-2015 <ul style="list-style-type: none"><li>Dissertation Title: "Sizing Methodology and Life Improvement of Energy Storage Systems in Microgrids"</li></ul> <b>The Ohio State University</b> , Columbus, Ohio USA M.S., Electrical and Computer Engineering, 2011-2014 <b>The Ohio State University</b> , Columbus, Ohio USA M.S., Mechanical Engineering, 2009-2011 <ul style="list-style-type: none"><li>Dissertation Title: "Analysis of Heat-Spreading Thermal Management Solutions for Lithium-Ion Batteries"</li></ul> <b>The University of Jordan</b> , Amman, Jordan B.S., Mechatronics Engineering, 2003-2008	
AWARDS	IEEE Industry Applications Magazine Prize Article Award-second place, USA, 2016. "Made in the Arab World" Graduation Project Award-first place, Egypt, 2009. "Made in Jordan" Graduation Project Award-second place, Jordan, 2009. The University of Jordan School of Engineering Dean's List, 2008.	
ACADEMIC EXPERIENCE	<b>The University of Jordan</b> , Amman, Jordan <i>Assistant Professor</i> <span style="float: right;"><b>May, 2015 - Present</b></span> Teaching autotronics, electronics, measurements, and transducers. <b>The Ohio State University</b> , Columbus, Ohio USA <i>Graduate Teaching Associate (GTA)</i> <span style="float: right;"><b>August, 2013 - May, 2015</b></span> Teaching electric machines laboratory. <i>Graduate Research Associate (GRA)</i> <span style="float: right;"><b>August, 2012 - August, 2013</b></span> Ph.D. research at Center for High Performance Power Electronics (CHPPE). <i>Graduate Research Associate (GRA)</i> <span style="float: right;"><b>April, 2011 - June, 2012</b></span> M.S. research at Center for Automotive Research (CAR). <i>Graduate Teaching Associate (GTA)</i> <span style="float: right;"><b>October, 2010 - April, 2011</b></span> Teaching statics.	

PUBLICATIONS:  
JOURNALS

**H. Khasawneh**, M. Illindala, "Battery Cycle Life Balancing in a Microgrid through Flexible Distribution of Energy and Storage", *Journal of Power Sources*, vol. 261, no. 1, pp. 378-388, 2014.

**H. Khasawneh**, and M. Illindala, "Supercapacitor cycle life equalization in a microgrid through flexible distribution of energy and storage resources," *IEEE Transactions on Industry Applications*, vol. 51, no. 3, pp. 1962-1969, 2015.

M. Illindala, **H. Khasawneh**, and A. Renjit, "Flexible distribution of energy and storage resources," *IEEE Industry Applications Magazine*, vol. 21, no. 5, pp. 32-42, 2015.

M. Kilani, **H. Khasawneh**, A. Badran, and A. Awidi, "Further development on a gentle electromagnetic pump for fluids with stress-sensitive microparticles," *Sensors and Actuators A: Physical*, vol. 247, no. 1, pp. 440-447, 2016.

PUBLICATIONS:  
CONFERENCES

O. Aljanaideh, M. Rakotondrabe, **H. Khasawneh**, M. Al Janaideh, "Rate-dependent Prandtl-Ishlinskii hysteresis compensation using inverse-multiplicative feedforward control in magnetostrictive Terfenol-D based actuators," 2016 American Control Conference (ACC), Boston, MA, 2016, pp. 649-654.

**H. Khasawneh**, M. Illindala, "Quantitative and Qualitative Evaluation of Flexible Distribution of Energy and Storage Resources," in *Proc. of IEEE ECCE*, pp. 43-50, 15-19 Sept. 2013.

**H. Khasawneh**, M. Illindala, "Equalization of Battery Life through Flexible Distribution of Energy and Storage Resources," in *Proc. of IEEE ICPS*, pp. 1-9, 20-23 May 2014.

**H. Khasawneh**, M. Illindala, "State-of-Health based Load Sharing Strategy in Vehicle-To-Grid Systems," in *Proc. of IEEE ITEC*, pp. 1-6, 15-18 Jun 2014.

**H. Khasawneh**, M. Illindala, "Supercapacitor Cycle Life Equalization in a Microgrid through Flexible Distribution of Energy and Storage Resources," in *Proc. of IEEE IAS Annual Meet.*, pp.1-9, 5-9 Oct 2014.

**H. Khasawneh**, M. Smalc, and J. Norley, Analysis of Heat-Spreading Thermal Management Solutions for Lithium-Ion Batteries, in *Proc. of ASME Mechanical Engineering Congress and Exposition IMECE*, 2011.

M. Haj-ahmed, **H. Khasawneh**, M. Illindala, "Autonomous Cooperative Agent Based Flexible Distribution of Energy and Storage Resources," in *Proc. of IEEE PEDES*, pp. 1-6, 16-19 Dec 2014.

**H. Khasawneh**, A. Mondal, M. Illindala, B. Schenkman, D. Borneo, "Evaluation and Sizing of Energy Storage Systems for Microgrids," in *Proc. of ICPS*, pp. 1-8, 5-8 May 2015.

D. Mao, **H. Khasawneh**, M. Illindala, B. Schenkman, D. Borneo, "Economic Evaluation of Energy Storage Options in a Microgrid with Flexible Distribution of Energy and Storage Resources," in *Proc. of IEEE ICPS*, pp. 1-7, 5-8 May 2015.

M. Kilani, **H. Khasawneh**, A. Abbadi, "Design and testing of a gentle pump with rotating magnetic field for fluids with stress-sensitive microparticles," in *Proc. of IEEE ISMA*, pp. 1-4, 8-10 Dec 2015.

PROFESSIONAL  
EXPERIENCE

**Water, Energy and Environment Center / The University of Jordan**, Amman, Jordan

*Deputy Director*

**Sep, 2016 - Present**

**Centers for Natural Resources and Development (CNRD) Network**

*Coordinator*

**Nov, 2016 - Present**

**Dar Al-Handasah**, Amman, Jordan

*Consultant Engineer*

**April, 2008 - November, 2008**

**The University of Jordan**, Amman, Jordan

*Graduation Project*

**March, 2007 - January, 2008**

Design of Automated Wireless Dual Solar-Diesel Thermal System for Residential Space and Water Heating.

**Heinz Nixdorf Institute**, University of Paderborn, Paderborn, Germany

*IAESTE Intern*

**July, 2007 - September, 2007**

PROFESSIONAL  
MEMBERSHIPS

The Institute of Electrical and Electronics Engineers (IEEE)- Power and Energy Society (PES)  
The Institute of Electrical and Electronics Engineers (IEEE)- Industry Applications Society (IAS)  
The Institute of Electrical and Electronics Engineers (IEEE)- Control Systems Society (CSS)  
The Institute of Electrical and Electronics Engineers (IEEE)- Young Professionals  
Jordan Engineers Association

VOLUNTEER  
WORK

**Reviewer**, IEEE Transactions on Transportation Electrification, 2015-2016.  
**Reviewer**, IEEE Transactions on Power Electronics, 2016.  
**Reviewer**, IEEE Transactions on Industry Applications, 2014.  
**Reviewer**, IEEE IAS Annual Meeting 2015.  
**Reviewer**, International Journal of Electrical Power and Energy Systems, 2014-2015.  
**Reviewer**, IEEE Transportation Electrification Conference and Expo (ITEC), 2014-2015.  
**Reviewer**, IEEE Applied Power Electronics Conference and Exposition (APEC), 2014.  
**Reviewer**, IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies (AEECT), 2015.  
**Judge**, The 11th National Robotics Competition in Jordan, 2016.  
**Proctor**, IEEEExtreme Programming Competition 9.0 in Jordan, 2016.