

THOMAS JOHN (PhD, ME, BE, MIEEE, MIET, AFHEA)  
Engineering  
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## Qualifications

Electrical & Electronic Engineering, PhD, Operation & Control of Multi-area Multi-microgrid Systems, Nanyang Technological University  
8 Aug 2012 → 4 Oct 2017  
Award Date: 4 Oct 2017

## Employment

**Lecturer in Electrical Engineering**  
Engineering  
Edge Hill University  
5 Sept 2022 → present

## Research outputs

### **A Control Architecture for Regulating Voltage and Power Flows in a Networked Microgrid System**

John, T. & Khan, U., 1 Feb 2024, In: International Transactions on Electrical Energy Systems. 2024, p. 1-14 14 p., 6690355.

### **Stacking different services of an energy storage system in a grid-connected microgrid**

JOHN, T., Sarantakos, I. & Teo, T. T., 1 Aug 2022, In: Renewable Energy. 195, p. 357-365

### **Optimization of fuzzy energy-management system for grid-connected microgrid using NSGA-II**

Teo, T. T., Logenthiran, T., Woo, W. L., Abidi, K., John, T., Wade, N. S., Greenwood, D. M., Patsios, C. & Taylor, P. C., 1 Nov 2021, In: IEEE Transactions on Cybernetics. 51, 11, p. 5375-5386 12 p.

### **Non-local harmonic current and reactive power compensation for a multi-microgrid system using a series-shunt network device**

John, T., Patsios, C. & Greenwood, D., 4 Dec 2020, In: IET Generation, Transmission and Distribution. 14, 23, p. 5655-5666 12 p.

### **Delay Compensation Amongst Aggregated Storage Assets Providing Fast Frequency Regulation**

Zhu, Q., Bolzoni, A., Forsyth, A., Todd, R., Smith, M., Gladwin, D. T., John, T., Patsios, C., Jones, G. & Rogers, D. J., 29 Nov 2020, *2020 IEEE 9th International Power Electronics and Motion Control Conference, IPEMC 2020 ECCE Asia*. Institute of Electrical and Electronics Engineers Inc., p. 1402-1408 7 p. 9367903. (2020 IEEE 9th International Power Electronics and Motion Control Conference, IPEMC 2020 ECCE Asia).

### **A two-level coordinated voltage control scheme of electric vehicle chargers in low-voltage distribution networks**

Wang, Y., John, T. & Xiong, B., 1 Mar 2019, In: Electric Power Systems Research. 168, p. 218-227 10 p.

### **Voltage and frequency control during microgrid islanding in a multi-area multi-microgrid system**

John, T. & Lam, S. P., 20 Apr 2017, In: IET Generation, Transmission and Distribution. 11, 6, p. 1502-1512 11 p.

### **Coordinated operation of a microgrid with a distribution network device**

John, T., Wang, Y., Tan, K. T. & So, P. L., 19 Jan 2016, *Proceedings of the 2015 IEEE Innovative Smart Grid Technologies - Asia, ISGT ASIA 2015*. Institute of Electrical and Electronics Engineers Inc., 7387070. (Proceedings of the 2015 IEEE Innovative Smart Grid Technologies - Asia, ISGT ASIA 2015).

### **Model Predictive Control of Distributed Generation inverter in a microgrid**

John, T., Wang, Y., Tan, K. T. & So, P. L., 11 Aug 2014, *2014 IEEE Innovative Smart Grid Technologies - Asia, ISGT ASIA 2014*. IEEE Computer Society, p. 657-662 6 p. 6873870. (2014 IEEE Innovative Smart Grid Technologies - Asia, ISGT ASIA 2014).

### **Modules Taught**

Power Electronics  
Electrical Machines  
Power Systems  
Electrical & Electronics Fundamentals  
Electromagnetic Theory  
Engineering R & D project

### **Software Skills**

MATLAB  
POWER WORLD  
PSIM