

## Biographical Sketches for Yuan Liao

### (a) Professional preparation

#### Undergraduate institution

Xi'an JiaoTong University, Xi'an, China

#### Major Degree & Year

B.S. Electrical engineering, 1993

#### Graduate institutions

Xi'an JiaoTong University, Xi'an, China

National University of Singapore, Singapore

Texas A&M University, College Station, Texas

#### Major Degree & Year

M.S. Electrical engineering, 1996

M.S. Electrical engineering, 1997

Ph.D. Electrical engineering, 2000

### (b) Appointments

07/2010 - present	Associate Director for the Graduate Program of Power and Energy Institute of Kentucky, University of Kentucky, Lexington, KY
07/2009 - present	Associate Professor, Dept. of Electrical and Computer Engineering, University of Kentucky, Lexington, KY
08/2005 – 07/2009	Assistant Professor, Dept. of Electrical and Computer Engineering, University of Kentucky, Lexington, KY
03/2005 - 08/2005	Principal Consulting R&D Engineer, Power Technology Division, ABB Corporate Research Center, Raleigh, NC
08/2000 - 03/2005	Consulting R&D Engineer, Power Technology Division, ABB Corporate Research Center, Raleigh, NC

### (c) Selected recent publications

1. Yuan Liao, "Generalized fault location methods for overhead electric distribution systems", *IEEE Transactions on Power Delivery*, accepted in July 2010, in press.
2. Xiaoming Feng and Yuan Liao, "Unit commitment by structure based solution and efficient Lagrangian relaxation", *International Journal of Emerging Electric Power Systems*, Vol. 11, No. 1, Article 9, 2010.
3. T.S. Sidhu, J. Burnworth, A. Darlington, B. Kasztenny, Yuan Liao, et al, "Bibliography of relay literature, 2007 IEEE committee report", *IEEE Transactions on Power Delivery*, Vol. 25, No. 1, January 2010, pp. 88-101.
4. Yuan Liao, "Fault location observability analysis and optimal meter placement based on voltage measurements", *Electric Power Systems Research*, Vol. 79, No. 7, July 2009, pp. 1062-1068.
5. Yuan Liao, "Equivalent PI circuits for zero-sequence networks for parallel transmission lines", *Electric Power Components & Systems*, Vol. 37, No. 7, July 2009, pp. 787-797.
6. Thai Nguyen and Yuan Liao, "Power quality disturbance classification utilizing s-transform and binary feature matrix method", *Electric Power Systems Research*, Vol. 79, No. 4, April 2009, pp. 569-575.
7. Yuan Liao and Mladen Kezunovic, "Online optimal transmission line parameter estimation for relaying applications", *IEEE Transactions on Power Delivery*, Vol. 24, No. 1, January 2009, pp. 96 - 102.
8. Yuan Liao and Thai Nguyen, "Power angle stability study of a large utility system", *International Review of Electrical Engineering*, Vol. 3, No. 2, April 2008, pp. 265-272.

9. Yuan Liao and Ning Kang, "Fault location algorithms without utilizing line parameters based on distributed parameter line model", *IEEE Transactions on Power Delivery*, Vol. 24, No. 2, April 2009, pp. 579 - 584.
10. Yuan Liao, "Fault location for single-circuit line based on bus impedance matrix utilizing voltage measurements", *IEEE Transactions on Power Delivery*, Vol. 23, No. 2, April 2008, pp. 609-617.
11. Yuan Liao and Mladen Kezunovic, "Optimal estimate of transmission line fault location considering measurement errors", *IEEE Transactions on Power Delivery*, Vol. 22, No. 3, July 2007, pp. 1335-1341.

**(d) Student advising**

Completed graduates:

Thai Dang Nguyen (Ph.D.), Ning Kang (Ph.D.), Man Mohan Bonthu (M.S.), Karthikeyan Kasinathan (M.S.), Praveen Settipalli (M.S.), Vijaya Reddy (M.S.), Hiroshi Sako (M.S.), Ragnu Sundeep Telidevara (M.S.), Mohammad Museb Iftakhar (M.S.), David Williams (M.S.), Jiaxiong Chen (M.S.)