

**YAN LIU, PhD**

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 Wright State University  
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**EDUCATION**

|   |                                      |  |      |
|---|--------------------------------------|--|------|
| <b>PhD</b>  | School of Industrial Engineering     | Purdue University, W. Lafayette                | 2006 |
| <b>MS</b>   | School of Industrial Engineering     | Purdue University, W. Lafayette                | 2001 |
| <b>BS</b>   | Department of Mechanical Engineering | University of Sci. & Tech. Beijing, P.R. China | 1998 |
| <b>Graduate Certificate of Applied Statistics</b>           | Department of Statistics             | Purdue University, W. Lafayette                | 2005 |
| <b>Graduate Certificate of Applied Management Principle</b> | School of Management                 | Purdue University, W. Lafayette                | 2004 |

**RESEARCH INTERESTS**

Information Visualization, Data Mining, Human Decision Making, Human-Computer Interaction, Usability Evaluation, Computer-supported Cooperative Work, Cross-Cultural Study, Modeling and Simulation

**PROFESSIONAL EXPERIENCES**

|                            |   |                   |
|----------------------------|---|-------------------|
| <b>Assistant Professor</b> | Department of Biomedical, Industrial and Human Factors Engineering, Wright State University | 2006 ~ Present    |
| <b>Research Assistant</b>  | School of Industrial Engineering, Purdue University   | 2000 ~ 2006       |
| <b>Research Assistant</b>  | School of Education, Purdue University  | 2003 ~ 2006       |
| <b>Teaching Assistant</b>  | Department of Mathematics, Purdue University  | 2002              |
| <b>Engineer Intern</b>     | Blue Ridge Metals Corp., Asheville, NC  | 05/2002 ~ 08/2002 |
| <b>Assistant Engineer</b>  | Beijing Hua-Run Mech. & Elec. Inc, Beijing, P.R. China                                      | 1998 ~1999        |

## AWARDS and HONORS

|   |   |      |
|---|---|------|
| <b>ASEE U.S. Air Force Summer Faculty Fellowship</b>    |   | 2008 |
| <b>Bisland Dissertation Fellowship</b>                  | Purdue University                             | 2005 |
| <b>Graduate Student Travel Grant</b>                    | Purdue University                             | 2005 |
| <b>Certificate of Appreciation</b>                      | Blue Ridge Metals Corp., Asheville, NC        | 2002 |
| <b>The Top Rank Student Scholarship</b>                 | University of Sci.& Tech. Beijing, P.R. China | 1997 |
| <b>Bao Steel Excellent Student Scholarship</b>          | University of Sci.& Tech. Beijing, P.R. China | 1996 |
| <b>SONY Excellent Student Scholarship</b>               | University of Sci.& Tech. Beijing, P.R. China | 1995 |
| <b>Title of “Beijing Three-Honor Excellent Student”</b> | Beijing, P.R. China                           | 1995 |

## PATENT PENDING

Nof, S.Y. Liu, Y., and Jeong, W. 2007, “Fault-Tolerant Time-Out Communication Protocol with Sensor Integration”, Pending, Purdue Ref. No: P-62028.30 US

## PROFESSIONAL ACTIVITIES

|                                |  |             |
|--------------------------------|--|-------------|
| <b>Editorial Board</b>         | International Journal of Human-Computer Interaction      | 2008 ~ 2010 |
| <b>Scientific Board Member</b> | Human-Computer Interaction International 2009 Conference | 2009        |
| <b>Scientific Board Member</b> | Applied Ergonomics International 2008 Conference         | 2008        |
| <b>Technical Session Chair</b> | Human-Computer Interaction International 2005 Conference | 2005        |

Served a referee for journals International Journal of Human-Computer Studies, International Journal of Human-Computer Interaction, Applied Ergonomics, Behaviour and Information Technology, International Journal of Production Research, International Journal of Computer Integrated Manufacturing, IIE Transactions on Manufacturing and Design, Computers & Industrial Engineering, Automation in Construction, and IFAC Control Engineering

## PUBLICATIONS

### PUBLISHED

- Liu, Y. and Salvendy, G. (2008). Effects of Measurement Errors on Psychometric Measurements in Ergonomics Studies: Implications for Correlations, ANOVA, Linear Regression, Factor Analysis, and Linear Discriminant Analysis. *Ergonomics* (In Press).
- Liu, Y. and Nof, S.Y. (2008). Fault-Tolerant in Distributed Micro Flow-Sensor Arrays and Networks. *Computers & Industrial Engineering*, 54(3), 634-647.
- Liu, Y. and Salvendy, G. (2007). Visualization Support to Better Understand and Improve Decision Tree Mining Process: A Survey and Appraisal. *Theoretical Issues in Ergonomics Science*. 8(1), 63-92.
- Liu, Y. and Salvendy, G. (2006). Design and Evaluation of Interactive Visual Decision Tree Classification. *International Journal of Human-Computer Studies*, 65(2), 95-110.
- Liu, Y. and Salvendy, G. (2006). Design and Evaluation of Visualization Support to Facilitate Association Rules Modeling”, *International Journal of Human-Computer Interaction*, 21(1), 15-38.
- Liu, Y. and Salvendy, G. (2005). Visualization Support to Facilitate Association Rules Mining Process: A Survey. *Ergonomia.-An International Journal of Ergonomics and Human Factors*, 27(1), 11-23.
- Liu, Y. and Nof, S.Y. (2004). Distributed Micro Flow-Sensor Arrays and Networks: Design of Architectures and Communication Protocols. *International Journal of Production Research*, 42(15), 3101-3115.
- Williams, N.P., Liu, Y., and Nof, S.Y. (2003). Analysis of Workflow Protocol Adaptability in TestLAN Production Systems. *IIE Transactions on Manufacturing and Design*, 35(10), 965-972.
- Williams, N.P., Liu, Y., and Nof, S.Y. (2002). TestLAN Approach and Protocols for the Integration of Distributed Assembly and Test Networks. *International Journal of Production Research*, 40(17), 4505-4522

### BOOK CHAPTER

- Liu, Y. (2007). Data Mining and Its Applications in Digital Human Modeling. In Vincent Duffy (Ed.) *Handbook of Digital Human Modeling: Research for Applied Ergonomics and Human Factors Engineering*. (In Press). Taylor & Francis CRC Press.
- Liu, Y. (2006). Visualization Support to Data Mining Modeling. In Waldemar Karwowski (Ed), *2nd Edition of International Encyclopedia of Ergonomics and Human Factor* (pp.1353-1356). Oxford, UK: Taylor and Francis.

## CONFERENCE PROCEEDINGS

- Reis, G., Liu, Y., Havig, P., and Heft, E. (2008) Investigating the effects of depth on visual search in the multi-layered display. In *2<sup>nd</sup> International Conference on Applied Human Factors and Ergonomics*, July 2008, Las Vegas, Nevada.
- Liu, Y. and Salvendy, G. (2007). Interactive decision tree modeling. In *12th International Conference on Human-Computer Interaction*, CD-ROM, July 2007, Beijing, China. Lawrence Erlbaum Associates, Inc.
- Liu, Y. and Salvendy, G., 2005, "Interactive Visual Association Rules Modeling", in *11th International Conference on Human-Computer Interaction*, CD-ROM, July 2005, Las Vegas, Nevada, Lawrence Erlbaum Associates, Inc., NJ
- Liu, Y. and Nof, S.Y., 2001, "Distributed micro flow-sensor network design and modeling", *Proceedings of IFAC Workshop on Manufacturing, Modeling for Management and Control*, Prague, C.R., pp. 161-166.