Xiaoyan QIAN

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Education Background

- 2013-2016: M.Eng. in Industrial Engineering
  - Zhejiang Science and Technology University (ZSTU)
  - Overall GPA: 92.90/100 Ranking: 1/125
- 2009-2013: B.Eng. in Industrial Engineering
  - Zhejiang University of Technology (ZUT)
  - Overall GPA: 87.30/100 Ranking: 1/135

Research Interests

- Operations Research
- Data-Driven Decision-Making under Uncertainty
- Production and Logistic Optimization
- Statistical Analysis

Selected Publications

- Xiaoyan QIAN, Renwang LI, *et al*. "Modeling Carbon Footprint of Tobacco Industry Based on PLC Across the Supply Chain", *International Journal of Advanced Manufacturing Technology*, **2016**. (Under Revision)
- Wu X, Li R, Qian X, et al. The value network optimization research based on the Analytic Hierarchy Process method and the dynamic programming of cloud manufacturing[J]. The International Journal of Advanced Manufacturing Technology, 2015: 1-9.
- Ning LI and Xiaoyan QIAN. "Simulation and Optimization of Assembly Workshop Production Logistics Based on ED", *Modular Machine Tool & Automatic Manufacturing Technique*, (4): 154-160, **2014**.

Research Experience

- **The Smart Spare Part Inventory Management (Dec. 2016 - present)**

  School of Electrical & Electronic Engineering, NTU
  - Meet the production goals of furnaces in semiconductor wafer fabrication facilities
  - Develop the computer-based scheduling algorithms with full consideration of the process constraints
  - Replace the prior labor-extensive experience-dependent scheduling activities
  - Build GUI for the whole system implementation with Asp.net

- **NTU Forecast System (Aug. 2016 - present)**

  School of Electrical & Electronic Engineering, NTU

  - Reduce unanticipated machine failure or breakdowns
  - Develop preventive maintenances (PMs) are performed on the equipments in the fab
  - Build GUI for the whole system implementation with Asp.net
- **Product Lifecycle-oriented Modeling and its Application for Carbon Footprint in Supply-Chain Environment (Jan. 2015 – May. 2016)**

  Natural Science Foundation of China

  - Build and apply a carbon footprint analysis body in order to mitigate the green-house effects
  - Construct models for calculating carbon footprint, simulate models into Tobacco Industry and constantly optimize these models
  - Optimal models could be able to locate where carbon footprint was excessively emitting
- **Ontology-Driven Data Extraction and Calculation Method of Product Carbon Footprint based on Life Cycle (June 2015 - present)**

  Natural Science Foundation of Zhejiang Province

  - Develop an ontology-driven system for carbon footprint data extraction, model, semantic, mutual operation in the production life cycle
  - Construct a calculation and evaluation framework of carbon footprint by using PAS 2050 and ISO14067
  - Models could be able to evaluate the low-carbon supply chain management effectively
- **The System Layout Planning Program (Sept. 2012 - June 2013)**
  - Optimize technological process (Low-input and high-output)
  - Established original and optimized models in Enterprise Dynamics

Selected Honors and Awards

- Second Prize Scholarship for Excellent Postgraduate Students, 2014
- Excellent Student Leader, ZUT, 2013
- Second Prize for Provincial Undergraduate Mathematical Competition, 2011
- National Encouragement Scholarships and Excellent Undergraduate Scholarships, 4 times, 2010-2013

Professional skill

- Software: Asp.net, MATLAB, Enterprise Dynamics, Auto CAD, FlexSim, Visual Studio
- Coding: C#, Python, html, CSS, JS
- Language: Chinese (native), English (IELTS: 6.0/9.0)

Work Experience

- Research Assistant in school of EEE at NTU, 2016.8- so far
- Teaching Assistant for the graduate course “Operation Research”, 2014-2015