# Mengyuan WU

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## Research Interests

- Evolutionary computation
- Multiobjective optimization
- Stable matching theory
- Machine learning

## Education

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|---|---|
| 09/2014 - Present | **Doctor of Philosophy in Computer Science** |
| | City University of Hong Kong, Hong Kong |
| 09/2013 - 07/2014 | **Master of Science in Industrial Sciences** |
| | University of Leuven - KU Leuven, Belgium |
| 09/2011 - 07/2013 | **Bachelor of Science in Industrial Sciences** |
| | Group T - International University College Leuven, Belgium |
| 09/2010 - 07/2011 | **Undergraduate Study** |
| | Sichuan University, China |

## Research Experiences

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|---|---|
| 09/2014 - Present | **Stable Matching Theory in Multiobjective Evolutionary Algorithm Based on Decomposition (MOEA/D)** |
| | City University of Hong Kong, Hong Kong |
| | Mentor: Professor Sam Kwong, Dr. Ke Li and Professor Qingfu Zhang |
| | Dealing with different issues in multiobjective evolutionary algorithms with the stable matching theory |
| 09/2013 - 04/2014 | **Optimization of Network-on-Chip (NoC) Design Using Evolutionary Algorithms** |
| | Glyndŵr University, UK in collaboration with Newcastle University, UK |
| | Mentor: Dr. Bo Liu |
| | Designed a surrogate model assisted evolutionary algorithm for NoC design |
| 06/2013 - 09/2013 | **Antenna Design Automation** |
| | Glyndŵr University, UK in collaboration with KU Leuven, Belgium |
| | Mentor: Dr. Bo Liu |
| | Worked on linking MATLAB and electromagnetism simulation software |
| 09/2013 - 06/2014 | Master Thesis: **Implementation of a Feature Detection Algorithm on FPGA System-on-Chip (SoC) Boards for Robot Cars** |
| | KU Leuven, Belgium |
| | Mentor: Dr. Lin Zhang |
| | Implemented the SURF algorithm on an FPGA SoC board for object detection |

# Teaching Experiences

**Tutorial Instructor**
- Fundamentals of Internet Applications Development (CS2204) - Semester B 2016/17

**Teaching Assistant**
- Computer Networks (CS3201) - Semester A 2016/17
- Introduction to Internet and Programming (CS1303) - Semester B 2015/16
- Fundamentals of Computer Networks and the Internet (C3270) - Semester B 2014/15
- Computer Networks (CS3201) - Semester A 2014/15

# Publications

- **M. Wu**, K. Li, S. Kwong, Y. Zhou, Q. Zhang, "Matching-based selection with incomplete lists for decomposition multi-objective optimization", IEEE Transactions on Evolutionary Computation, 2017.
- Y. Zhou, S. Kwong, Q. Zhang, and **M. Wu**, "Adaptive patch-based sparsity estimation for image via MOEA/D," Evolutionary Computation (CEC), 2016 IEEE Congress on, 2016.
- **M. Wu**, S. Kwong, Q. Zhang, K. Li, R. Wang, B. Liu, "Two-Level Stable Matching-Based Selection in MOEA/D," Systems, Man, and Cybernetics (SMC), 2015 IEEE International Conference on, 2015.
- **M. Wu**, A. Karkar, B. Liu, A. Yakovlev, G. Gielen and V. Grout, "Network on chip optimization based on surrogate model assisted evolutionary algorithms," Evolutionary Computation (CEC), 2014 IEEE Congress on, 2014.

# Skills

- **Computer Skills:** Java, C/C++, MATLAB, Python, LaTeX, HTML
- **Language Skills:** Chinese, English