Yanling Zhi

A Software Engineer and Researcher



Education

Sep. 2007 – **Ph.D.**, State-Key Lab. of ASIC & System, Fudan University, Shanghai, GPA 3.78/4.

June 2012 • Thesis: Efficient Algorithms for Critical Problems in Clock Skew Scheduling;

 Supervisors: Prof. Hai Zhou (Northwestern University) and Wai-Shing Luk (Fudan University).

Sep. 2003 - **B.E.**, Electrical Engineering, Wuhan University, Wuhan, GPA 3.63/4.

June 2007 \circ Graduated with Rank 1st out of 77, and thereafter joined State-Key Lab. of ASIC & System with recommendation.

Experience

Vocational

July 2012 - Senior Software Engineer, MicroStrategy, Hangzhou.

Present Worked on MicroStrategy Mobile for iPad/iPhone (http://www.microstrategy.com/mobile).

- Participated in the entire lifecycle of new feature development.
- Focused on building prototypes, integrating with the product, testing and fixing issues.
- Effectively communicated and collaborated with managers, architects and cross-team engineers in both China and US.
- Featured work includes:
 - Navigation document (tab bar);
 - Panel caching;
 - Resetting to first panel;
- Grew to be a mature programmer on Objective-C/iOS in three months (from a green hand).

Jan 2011 – **R&D Engineer Intern (Part-time)**, *Verigy*, Shanghai.

Dec. 2011 Worked on algorithms design for Memory Redundancy Repair product

- Formally formulate the memory redundancy repair problem, and proposed new algorithms based on perfect matching in bipartite graphs;
- o Implemented a prototype to validate the efficiency of the algorithms;
- Worked closely with engineers in both China and Germany.

Aug. 2009 - R&D Engineer Intern, Verigy, Shanghai.

May 2010 Worked on parallel computing for the product MTL.

- Designed multithreading algorithms and implemented prototypes based on C++ Library Threading Building Blocks;
- Remarkable speedup was achieved on industrial benchmarks;
- The work was integrated into the products of next generation;
- Won the 2010 Brilliance of Innovation Honorable Mention award in Verigy.

Academic

Dec. 2009 - Researched on clock skew optimization algorithms.

- Mar. 2012 Proposed novel efficient algorithms based on network flow algorithms for multi-domain clock skew scheduling and yield-driven clock skew scheduling;
 - \circ Programmed extensively using C/C++ in building prototypes to validate the efficiency of algorithms;
 - Acquired solid skills in algorithms research and development, and paper writing;
 - Publications as first author on world-class conferences/journals in Electronic Design Automation field (http://scholar.google.com/citations?user=w-DiTg4AAAAJ):
 - 1. Yanling Zhi, Wai-Shing Luk, Hai Zhou and Xuan Zeng, Smipref: An efficient method for multi-domain clock skew scheduling. Integration, the VLSI Journal, 2012.
 - 2. Yanling Zhi, Wai-Shing, Luk, Yi Wang, Changhao Yan and Xuan Zeng, Yield-driven clock skew scheduling for arbitrary distributions of critical path delays. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 95(12):2172–2181, 2012.
 - 3. Yanling Zhi, Wai-Shing Luk, Hai Zhou, Changhao Yan, Hengliang Zhu and Xuan Zeng, An efficient algorithm for multi-domain clock skew scheduling. In IEEE Design, Automation & Test in Europe Conference & Exhibition (DATE) 2011, pages 1-6, France, 2011.
 - 4. Yanling Zhi, Hai Zhou and Xuan Zeng. A practical method for multi-domain clock skew optimization. In 16th IEEE Asia and South Pacific Design Automation Conference (ASP-DAC), pages 521-526. Japan, 2011.

July 2008 – Researched on formal verification algorithms.

- Nov. 2009 Worked on sequential equivalence checking problems;
 - Proposed a new algorithm based on bounded model checking using covering relations among signals in sequential circuits;
 - Built prototypes to verify the efficiency of the algorithm.

Sep. 2007 - **Developed PhysicalCMP simulation tools**.

- July 2008 Worked as one of the core programers in the entire development process;
 - Designed and implemented graphical user interface (using Qt Library) and chilp layout information extraction algorithms in C++;
 - o The work was later integrated into National Major Science & Technology Project in the Eleventh Five-Year period;

Professional Skills

- Proficient in C/C++ programming (5+ years experience);
- Experienced in object-oriented programming, parallel computing on multithreading platforms;
- \circ Experienced in Objective-C, iOS programming (0.8 year experience);
- Skilled in algorithms design;
- Familiar with Matlab programming and shell;
- Interested in design patterns.

Languages

English Fluent in both spoken and written English. CET-6: 93/100, TOEFL: 617/677.

Chinese Native.

Awards and Honors

2011 Won the Intel Fellowship Winner award.

2010 Won the Brilliance of Innovation Honorable Mention award in Verigy.

2008-2010 Won Academic Scholarship in Fudan University every year.

2007 Joined State-Key Lab. of ASIC & System without taking post-graduate entrance

examination, and also won the Entrance Scholarship in Fudan University.

2003-2007 Won first class People Scholarship and "Merit Student" title in Wuhan University

every year; won LG Electronics Scholarship in 2005.

Community and Contacts

Home page: http://Dr-Zhi.com (personal blog)

GitHub: https://github.com/Dr-Zhi

LinkedIn: http://www.linkedin.com/in/DrYanlingZhi

Email: i@dr-zhi.com

Self Evaluation

A software developer and researcher, who is always willing and eager to learn new technologies, and strives for perfection in working naturally.