Zigang Xiao

Curriculum Vitae

Dept. of Computer Science & Engineering
The Chinese University of Hong Kong
Shatin, N.T., Hong Kong
☎ *+852 6929-3214*
✉ *zgxiao@cse.cuhk.edu.hk*
http://www.cse.cuhk.edu.hk/~zgxiao

Education

8/2008- 7/2010(expected)	**Master of Philosophy**, *Department of Computer Science and Engineering, THE CHINESE UNIVERSITY OF HONG KONG (CUHK)*, Shatin, Hong Kong. Supervisor: Dr. Evangeline, F.Y. Young [Cumulative GPA: **3.90/4.00**]
9/2004 - 7/2008	**Bachelor of Science**, *Department of Computer Science, School of Information Science and Technology, SUN YAT-SEN UNIVERSITY (SYSU)*, Guangzhou, China [Cumulative GPA: **3.89/4.00**, Ranking: **1/200**, Outstanding Graduate Award]
1/2007 - 6/2007	**Exchange Program**, *Department of Computer Science and Engineering, THE HONG KONG UNIVERSITY OF SCIENCE and TECHNOLOGY (HKUST)*, Clear Water Bay, Hong Kong [Cumulative GPA: A-, Dean's List Award]

Research Interests

- VLSI CAD, Algorithms, Operating Systems

Publications

Z. XIAO and E. F. Young, "Crossrouter: A droplet router for cross-referencing digital microfluidic biochips," Proceeding of 15th Asia and South Pacific Digital Automation Conference, ASP-DAC '10, Jan. 2010.

Z. XIAO and E. F. Young, "Droplet-routing-aware module placement for cross-referencing biochips," Proceeding of International Symposium on Physical Design, ISPD '10, Mar. 2010.

X. YANG, Z. XIAO, and D. Y. Wu, "Improving redundacy addition and removal using unreachable states," Proceeding of International Symposium on Circuits and Systems, ISCAS '10, May 2010.

Academic Awards

- 2010, Second Place in ISPD 2010 High Performance Clock Network Synthesis Contest
- 2009, Fourth Place in ISPD 2009 Clock Network Synthesis Contest
- 2008, Outstanding Graduate Award, SYSU
- 2008, Excellent Graduation Thesis Award, SYSU
- 2008, First place in Guangdong Computer Programming Contest (GDCPC '08), Guangdong Computer Federation
- 2008, First place in ZSU Computer Programming Contest (ZSUCPC '08), SYSU
- 2005, 2006, 2007, First place in Academic Excellence Award, SYSU, (Academic Scholarship for students achieved School top 5%)
- 2006, Third place in ZSU Computer Programming Contest (ZSUCPC '06), SYSU

Experience

1/2010	**Participated in ISPD 2010 Clock Network Synthesis Contest and won second place**. A mesh-tree hybrid clock distribution network algorithm that aim to be robust under process variation is designed and implemented. Contributions:

- Design and implement the mesh-tree structure.

- Based on previous year's routing method, more stable and intelligent blockage aware routing is implemented.

1/2009	**Participated in ISPD 2009 Clock Network Synthesis Contest and won fourth place**. A blockage-aware clock distribution network algorithm is designed and implemented. Contributions:
	- Design and implement the block-aware rectilinear routing for the clock network.
	- Implement automation scripts of result evaluation.
10/2007-5/2008	**Project member**, *CS lab*, SYSU, Supervisor: Dr. Xiaola Lin.
	- Build a High performance computing cluster for CS lab.
	- Set up load balance scheme and deploy the Financial Computing project lead by Dr. Lin.
	- Design and implement Distributed Ray Tracer project in graduation thesis.
1/2007-5/2007	**Research Group Member**, *Software Lab*, SYSU, Supervisor: Dr. Xiaocong Zhou. Analyze the feasibility and complexity of using AOP in Algorithm Demonstration (AD) program and compare it with traditional OOP-style AD.

Teaching Assistant

Spring Semester, 2009-2010	**Course Tutor**, *CSC 3120, Compiler Construction*, CSE dept., CUHK, Instructor: Prof. NG, Kam-Wing.
Fall Semester, 2009-2010	**Course Tutor**, *CSC 3190, Introduction to Discrete Mathematics and Algorithms*, CSE dept., CUHK, Instructor: Prof. Evangeline F.Y. Young.
Spring Semester, 2008-2009	**Course Tutor**, *CSC 4430, Data Communication and Computer Networks*, CSE dept., CUHK, Instructor: Dr. WONG Tsz Young.
Fall Semester, 2008-2009	**Course Tutor**, *CSC & CEG 3150, Introduction to Operating Systems*, CSE dept., CUHK, Instructor: Dr. WONG Tsz Young.

Internship

3/2008 - 6/2008	**Software Designer**, *Ericsson Mobile Data Applications Technology Research and Development (Guangzhou) Co., Ltd. (CGC)*, Guangzhou. Research of PKI/CA system. Prototype design.

Bachelor's Thesis

Title	*Principle, Design and Implementation of Distributed Ray Tracing*
Supervisor	Dr. Lin Xiaola, CS dept., SYSU.
Description	In this thesis, a cluster system is built and distributed ray tracing is implemented. Performance analysis is made upon experiments. The experimental result demonstrates the efficiency and effectiveness of the proposed method.

Languages

English	**Fluent in speaking, good at writing.**
Chinese	**Native in Mandarin, Cantonese**

Referee

- Available upon request.

Interests

- Basketball
- Movies
- Swimming
- Guitar
- Reading
- Traveling