

BIYE JIANG

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EDUCATION

University Of California, Berkeley

PhD Candidate in Computer Science

August 2013 - Present

Tsinghua University

B.Eng in Computer Science & Technology

Overall GPA: 90.26 Rank 15/137 Major GPA: 91.47

August 2009 - July 2013

RESEARCH INTEREST

Information Visualization, Graphics, Interactive Systems and Information Retrieval

I am interested in providing high-quality visual information.

RESEARCH EXPERIENCE

Research Intern on Interactive Image processing

Sep 2012 - Jan 2013

Advisor: Prof. Kun Xu and Prof. Shimin Hu

Graphics Computing Group, Tsinghua

- This project focus on recovering image editing operator given the edited image and the source.

Stanford Undergraduate Visiting Research Program

Summer 2012

Advisor: Prof. Jeffrey Heer

Visualization Group, Stanford

- Project: Interactive Visual Analysis of Large Scale Geographic Data using WebGL
- Our novel approach applies WebGL-based parallel computation to enable rapid interaction in browsers.
- Much faster for data aggregation and rendering comparing to conventional SVG approach.
- Accepted paper: **imMens: Enabling Real-time Visual Querying of Big Data** (EuroVis 2013)

Student Research Training Program

Jun 2011 - Jan 2012

Advisor: Prof. Kun Xu

Graphics Computing Group, Tsinghua

- Basic research skills training. Working on Image-Processing projects with graduate students.
- Joined a project focusing on the interesting human vision phenomenon called change blindness.
- Accepted paper: **Change Blindness Images** (TVCG 2013)

SELECTED COURSE PROJECTS

Service Oriented Software Design and Development

–Build a web service to compute words' relationship with the help of WordNet and HowNet

Search Engine

–Build our own search engine using Lucene for indexing and Heritrix for web spider.

Database Management

– Implement our own database for TPCC & TPCCH test using C++ (Top three in the class)
– Implement a location based data search engine as web service

Computer Architecture Related

–Build our own CPU with the simplified MIPS16e using VHDL. (Team leader of the group)
–CUDA programing projects and JWAC Memory Scheduling Championship
–Simplify OpenCV library for Yocto OS on the Intel Atom platform

Cryptography

–A project focuses on security problems of Content Centric Network

TECHNICAL STRENGTHS

Programming Languages	C/C++, Java, JS, Scala, Python, SML, Racket, MATLAB, Assembly, VHDL
Tools, Libraries	OpenCV, WebGL, D3, Spark, Lucene, CUDA, Hadoop, MPI, OpenMP

COMPETITION AWARD

ACM International Collegiate Programming Contest		2009 - Present
–Champion once and Ranked 2 nd for 3 times in Asia Regional Contest		
Baidu A-Star Programming Competition	3 rd Place out of over 30,000 contestants	2011
Youdao Programming Competition	5 th Place out of over 21,000 contestants	2010
National Olympic in Informatics Competition	6 th Place out of 295 contestants	2008

TEACHING EXPERIENCE

Lectures for ACM-ICPC team from Beijing Institute of Technology	May 2011
–String Matching, Network Flow and Tree Algorithms	
Teaching Assistant at Tsinghua University	Sep 2009 - Jan 2010
–Fundamentals of Programming	
Lectures for Summer School of Olympic in Informatic at LiaoNing Province	Jul 2009
–Dynamic Programming and Graph Algorithms	

SCHOLARSHIP

ChangHong Scholarship	2012
Sohu Scholarship	2011
ChangHong Scholarship	2010
Freshman Scholarship	2009

SOCIAL ACTIVITY

Vice president in the student association, in charge of **public relations**
Experience with **Photoshop** and **Premiere** to design posters and videos
Director and editor of two short films made by our own.