PEI QING

mobile +86 18621110317
email edwardtoday@gmail.com

permanent address
Room 302 Building No. 31
1111 Donglan Road
Shanghai, 201101
P.R. CHINA

Gender	Male
Date of birth	March 17, 1988

Education

Major: Computer Science and Technology		Cumulative GPA:85/100
Degree of Bachelor of Engineering, Tsinghua University, Beijing,		Aug 2006 - Jul 2010
Minor: Economics		
Bachelor's Degree of Economics, Tsinghua University, Beijing,		Sep 2007 - Jul 2010

Academic Experiences

The First International Undergraduate Computer Science Summer School Workshop (funded by the National Science Foundation; part of project CPATHi18n), University of Oregon, Jul 2009

Student Research Training (SRT) project on image processing. Sep 2008 - May 2009
Mainly focusing on implementing and improving image segmentation algorithms. (Faculty Advisor: Professor Shimin Hu)

Working Experiences

Virtuos CO., LTD., Shanghai, Technical Dept. C++ Programmer, Jul 2010 - Present

Internship Experiences

Endress+Hauser Shanghai Automation Equipment CO., LTD., Shanghai, Marketing Dept. Intern, Aug 2009 - Sep 2009
Designed a Java application for product solution configurations and a 3D model (using Modo) as a supplement.

Leadership and Service Activities

2008~2009 Outstanding Student Leaders in Dept. of CS&T, Tsinghua University, Nov 2009

Head of Communication Department, Student Union of Department of Computer Science and Technology, Tsinghua University Jun 2008 - Sep 2009

Monitor of Class 62 of Dept. of Computer Science & Technology
Sep 2008 - Sep 2009

Volunteer Work in the 29th Olympic Games, Beijing Jul 2008 - Aug 2008
Excellent Volunteer at International Broadcast Centre (IBC), Sep 2008

Member of Communication Department, Student Union of Department of Computer Science and Technology, Tsinghua University May 2007 - Jun 2008

Social practice at Beichuan County, Sichuan Province Jul 2007

Computer Science Skills

Hardware Design:

16-bit MIPS CPU, Computer Architecture Course Project, Dec 2008
16-bit MIPS CPU with 43 custom designed instructions on a FPGA chip running at 17 kHz (project requirement). Still stable at 1 MHz (tested).A computer system is also build with the CPU and can run assembly code stored in memory which is typed in by user when the OS is running.

Mine Sweeper, Digital Logic Design Course Project, Jun 2008
FPGA realization of a mine sweeper game similar to that on the Windows OS with VGA video output control and PS/2 mouse control.

Software Design:

Realtime Parallel Decoding of 3D Video in MVC Format, Project for Bachelor's Degree, Feb 2010 - Jul 2010
Part of a project in China's National High-tech R&D Program (863 Program) taken by Media Lab in CS department of Tsinghua. The project aims at providing a solution for capturing, encoding, transmitting, decoding and displaying 3D video. The outcome might be used for online 3D broadcasting of the Asian Games late this year on some Chinese media. I am responsible of the realtime decoding of the 3D video stream on a parallel architecture.

IR_Fulltext_Search, Information Retrieval Course Project, Oct 2009 - Nov 2009
Implementation of linear search, character-based and word-based inverted list search. Time and space consumption compared between the three different solutions. Also implemented synonym search, stop-list and TFIDF sort of the results.

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TypeAheadSearch & FuzzyIndexer, Database & IR Course Project,
Nov 2009 - Dec 2009

TAS is a "search as you type" search engine for large text databases(the test case was 300MB+). FuzzyIndexer is a dictionary based search engine that returns strings in the dictionary similar to the query. Both search engine run at milli-seconds level.

MIPS-lite Simulator, Computer Architecture Course Project,   May 2009 - Jun 2009
Simplified MIPS CPU simulator in Java. Pipelining and forwarding is implemented in this project.

PhoneMe, Software Engineering Course Project,   Apr 2009 - Jun 2009
Java address book application. Including documentation on requirements, design and testing.

ShapeTalk, Java Course Project,   Sep 2008
Vector graphics paint application with Internet chat function.

Other Projects:

Mesh Simplification (C++), Modeling and Rendering with Phong Model (C++),
FTP client & server(C++), Simplified version of TCP and BGP protocol (C++), IPv4 receiving and sending & IPv6 forwarding (C++),
A Simple Compiler for the decaf language (Java),
Implementation of some Core Features of the xv6 Operating System (C & Assembly),
A Search Engine of Campus News Website with Open Source Tools (Java)

Softwares with Proficient Usage:

Programming: Visual Studio, Eclipse, NetBeans, XCode, Subversion, Quartus II, Xillinx ISE, Emacs
Multimedia: Photoshop, Final Cut, Modo

Language Skills

Mandarin: Mother tongue

English: Fluent in daily talks and in academical communication on my major, able to write English papers, no problem understanding lectures given by US or European professors

TOEFL iBT:	106,	Oct 2008
CET-6:	652,	Jun 2007
CET-4:	653,	Dec 2006
English Proficiency Test II of Tsinghua University:		
	92,	Jun 2007
English Proficiency Test of Tsinghua University:		
	92,	Dec 2006