BICHENG XU

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EDUCATION BACKGROUND

Simon Fraser University (SFU), Burnaby, Canada 09/2014 - 04/2017

BSc. in Computing Science, Dual Degree Program with ZJU, Minor in Mathematics

·GPA: 3.94/4.00

·Awards: 2016 Vice President Research Undergraduate Student Research Award (Science); 2016 Undergraduate Open Scholarship; 2014 SFU/ZJU Dual Degree Program Entrance Award

Zhejiang University (ZJU), Hangzhou, China 08/2012 - 07/2014

BEng. in Computer Science and Technology, Dual Degree Program with SFU

·GPA: 3.63/4.00

·Awards: 2015 Second-Class Volunteer Award; 2013-2014 Third-Class Scholarship for Outstanding Merits; 2012-2013 Third-Class Scholarship for Outstanding Merits

WORK EXPERIENCE

Ericsson Canada Inc., Burnaby, Canada 09/2015 - 12/2015

Software Developer Coop - IP Operating System Team Member

·Implemented the packet's incoming rate check feature for line cards according to different router platforms using C programming language

·Designed and implemented test cases for packet's incoming and outgoing rate check functions for line cards

LAB EXPERIENCE

Vision and Media Lab, SFU 05/2016 - Present

Research Assistant

·Carried out research on group activity recognition in videos using TensorFlow library

·Combined VGG Net, recurrent neural network, and connectionist temporal classification (CTC) to recognize a sequence of activities performed by a group of people in a video through supervised learning

·Will add weakly supervised learning on key participants of group activity to produce more concrete results

Computational Vision Lab, SFU 02/2016 - 06/2016

Part-time Volunteer Research Assistant

·Used Caffe framework to build fully-connected neural networks to explore the color prediction problem

·Given the information of two lights and the color of one pixel under one light, predicted the color of the same pixel under the other light

Network Modelling Lab, SFU 06/2015 - 12/2015

Part-time Volunteer Research Assistant

·Used Android mobile to do research and programmed on UI layout, Wi-Fi detection, cellphone sensors and network communication on Android platform

·Researched on bus tracking and arrival time prediction in urban environments based on Wi-Fi sensing

·Explored the problem on indoor location using cellphone's Wi-Fi detection and sensors of light, magnetic field and acceleration

COURSE-RELATED PROJECTS

A Simple Ray Tracer, Introduction to Computer Graphics, SFU 03/2016 - 04/2016

Individual Project

·Employed C++ with OpenGL API to implement the ray tracing global illumination model

·Rendered three spheres and a chess board with shadows, light reflections and refractions

·Extended the ray tracer to render two glass chess pieces and a glass chess board with their light interactions

QuickActivity Project, Web-Based Information Systems, SFU 06/2015 - 08/2015

Group Leader and Main Developer

·Used python-based Django as web development framework with deep understanding of Model View Controller (MVC) design pattern

·Supported the functions of activity searching, posting, attending, bookmarking and other useful features such as saving webpage as PDF files and exporting activity-attending information as CSV files

Automatic Course Arrangement Subsystem, Software Engineering, ZJU

05/2014-06/2014

Team Leader and Main Developer

·Developed the subsystem using PHP and MySQL for the back-end and HTML5, CSS3 and JavaScript for the front-end

·Supported the functions of course arrangement and schedule searching by setting different privileges to different kinds of users

A Turn-Based Strategy Game, Object-Oriented Programming, ZJU 11/2013 - 12/2013

Software Designer and Developer

·Built a LAN-connected turn-based strategy game with three team members

·Used C++ in QT development environment under Linux

·Connected multiple players in a local area network through TCP/IP using the <QtNetwork> library in QT

Flow Chart Conversion Application, Practice on Programming, ZJU 04/2013 - 05/2013

Programmer

·Programmed a flow chart conversion application only using C in Turbo C with another two team members

·Implemented the conversion from text to pixels properly

·Drew flow charts of every function of the input program on different pages

·Supported other features such as page selecting by keyboard input

COMMUNITY INVOLVEMENT

Red Cross Association, ZJU 02/2013 - 06/2014

Volunteer Mentor

·Organized and guided volunteers to pay visits to a local nursing home fortnightly

·Learnt first-aid skills including CPR in case of emergency

Corporation Investigation, ZJU 07/2013 - 08/2013

Team Leader and Organizer

·Conducted liaison with different companies for permission

·Investigated corporate cultures of offices of Augmentum, Morgan Stanley and IBM in Shanghai, China

SKILLS AND INTERESTS

Programming:	C, C++, Python, MATLAB, Java, JavaScript, PHP, HTML5, CSS3, HDL (Verilog Hardware Description Language), SQL, Swift (for iOS programming)
Language:	Mandarin (native), English (fluent)
Literature:	Keen on western and traditional Chinese poems and novels