# CHENYAO YANG

Computer Science, Honours, Regular program | University of Waterloo ID# 20510283 randyyang@live.com | (519) 781-3710 741 Karlsfeld Rd, Waterloo, ON, Canada N2T 2W9

SUMMARY OF QUALIFICATIONS						
Programming:	JAVA	C	C++	μC++	OpenGL	Latex
	MATLAB	SQL	JavaScript	LUA	HTML	Python
	SCHEME	BASH	Shell	Git	Photoshop	Blender

- Familiarity with data structure, various algorithm and automata theory
- Good experience with rendering computer graphic via interactive, ray tracing and radiosity
- Excellent algorithm design skills and good problem solving skills
- Good at combinatorics and optimization
- Good teamwork and communication skills
- Creative thinking and enjoy to making fun stuff
- Professional software documentation, implementation, and testing skills
- Intermediate economic knowledge in both micro and macro
- Good picture drawing and designing skills

#### **EDUCATION**

Candidate for Bachelor of Computer Science, Combinatorics and Optimization Minor Computer Science, Honours, Regular Program, University of Waterloo, Waterloo, Ontario

September 2013 – present

Class of 2017

**Relevant Project** 

"RPC" - Use C++ to implement the RPC and Binder in group of two

Use Dynamic Binder to connect multiple Server and multiple Client

"Basketball Shooting Game" - A C++ graphical game based on OpenGL

Focus on 3d rendering effect such as shadow, particle system, and skybox

"Ray Tracing Project" – A ray tracing program that able to render shadow, reflection, refraction and others Mar 2017(Winter 2017)

With anti-alias optimized

"Concession Service" – A concurrent and parallel system that have interactions among tasks Nov 2016(Winter 2016)

Handle asynchronous problem

Implement parallel operations through futures

"Natural Language Generation" – an OWL language about Harry Potter world Nov 2016(Winter 2016)

Generate human like language based on data

"Router" - write a program to find shortest routing path on network Nov 2016(Fall 2016)

"Arkanoid Battle" Android game - Remote battle game

made by group of four

OOP model on all object

Smart AI enemy

"OS161" (Operating system) - Focus on Multi-Thread, program running and memory management

Feb 2016(Winter 2016)

• 32bits MIPS system supporting multiple processors "WLP4 Compiler" - write a simple version of C++ compiler

"Chamber Crawler" (C++ project) – A genre of video game based upon the game Rough July 2015(Spring 2015)

Run on terminal and no GUI

### **Relevant Course**

**Computer Graphics** Algorithm design and analysis **Operating Systems** Distributed System Computer Network Object-Oriented Software Development(OOD) Artificial Intelligence Concurrent and Parallel Programming Computational discrete optimization Database management Network flow Software Design and Architecture Numerical computation **Data Structures and Data Management** Elementary Algorithm Design & Data Abstraction **Design Functional Programs** Computer Organization and Design **Foundations of Sequential Programs** 

#### **VOLUNTEER & WORKING EXPERIENCE**

# Application Engineer, TCL Corporation, Nanshan, Shenzhen, China

Two weeks android development training

- Fixing android tablet bugs
- Familiarity with android APIs
- Learning Mobile phone and Tablet development process

## **Computer Science Tutor**

Helping University of Waterloo student learning Scheme

Jan 2014 - April 2014

## **ACTIVITIES & INTERESTS**

Radio KWChaneelOne (online radio) DJ and technical assistance (Sept 2014 – Dec 2014)

Basketball Nine times University of Waterloo Intramural Basketball Team captain and two times champion (Jan 2014 – present)

Mar 2015 - May 2015

Jul 2017(Fall 2017)

April 2017(Winter 2017)

May 2016(Spring 2016)

Oct 2015(FALL 2015)