### LIU CHEN LU

#### **HIGHLIGHTS**

Have implemented sizable projects in C, C++, Python, Bash script, and Maple

Experienced with Haskell, Scheme, MATLAB, XML

Enthusiastic public speaker; able to program in teams and individually

<u>Tools experience</u>: Visual Studio, Cygwin, Vim, Command Line, Microsoft Office

Interests: machine learning, artificial intelligence, optimization, mathematics

#### **EDUCATION**

#### **BACHELOR OF COMPUTER SCIENCE. UNIVERSITY OF WATERLOO**

SEPT 2011-AUG 2016

3.90 GPA equivalent; Dean's Honour List

**BACHELOR OF BUSINESS ADMINISTRATION (CO-OP), WILFRID LAURIER UNIVERSITY** 

3.84 GPA equivalent; Dean's Honour List SEPT 2011-AUG 2016

## TECHNICAL EXPERIENCE

### **SOFTWARE INTERN AT USER MODEL, GOOGLE INC**

JAN 2014 – APR 2014

#### MATH DEVELOPER AT MAPLESOFT

JAN 2013 - APR 2013

- Designed and implemented the Maple Student Statistics package
  - E.g. implemented an interface that enables students to explore the effect of varying each input parameter on statistical properties in arbitrary distributions
- Applied programming's best practices with version control, code reviews, unit testing, and standard documentation; worked in a large, complex development environment

# UNDERGRADUATE RESEARCH ASSISTANT AT CENTRE FOR PATTERN ANALYSIS AND MACHINE INTELLIGENCE SEPT 2012 – JAN 2013

- Independently reviewed academic papers on various protein SVM string kernels for comparison against supervisor's categorization method
- Sought out and debugged code (in C++, Python, MATLAB) from other research projects to verify the runtime and accuracies stated in their research papers
- Modified Shogun's DNA string kernels to build a Python interface for protein analysis

# PERSONAL PROJECTS

- Functional evolutionary Boids simulating emergent behaviour, Haskell
- Context free parsing applied to the English language via the CYK algorithm, Python
- WLPP (subset of C++) to MIPS compiler, C++
- Scheduler using bipartite matching, Haskell
- Automated testing suite, Bash script

Github: https://github.com/LiuChenLu

Website: http://www.lclu.ca

### **AWARDS**

- The Google Anita Borg Memorial Scholarship, 2013
- Winning team in 24Hours of Good Hackathon at Google Scholars Retreat, 2013
- Google Challenge Award, 2011
- Semi-finalist team in New Venture Business Competition, 2011
- President's Centennial Award and Centennial Scholarship (WLU), 2011