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# 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

**Tools experience**: Visual Studio, Cygwin, Vim, Command Line, Microsoft Office

**Interests**: machine learning, artificial intelligence, optimization, mathematics

## TECHNICAL EXPERIENCE

**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

## 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*

## 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