

## 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

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**TECHNICAL EXPERIENCE** **MATH DEVELOPER AT MAPLESOFT** JAN 2013 – APR 2013

- Designed and implemented the Maple Student Statistics package
  - E.g. implemented an interface that enable students to explore the effect of varying each input parameters 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 test the runtime and accuracies stated their research papers
- Modified Shogun's DNA string kernels to build a Python interface for protein analysis

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**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://lclu.ca>

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**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**

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**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