Paul Liu

www.cs.ubc.ca/~inutard/paul.liu.ubc@gmail.com

EDUCATION Bachelor of Science, Honours Mathematics and Physics

University of British Columbia, Vancouver, BC, expected May 2014

SKILLS Languages: C++, Python, Matlab, Java, Mathematica, Go

Operating Systems: Windows, GNU/Linux

EXPERIENCE NSERC Research Assistantship (Summer 2012 - Spring 2013) &

Undergraduate Research Assistantship (Fall 2013 - Spring 2013)

Scientific Computing Lab, UBC

• Working with Prof. Chen Greif (UBC), I created a C++ software package for performing incomplete factorizations of symmetric indefinite matrices. Currently we are trying to extend the package to handle skew-symmetric matrices. The complete source code, as well as extensive documentation can be found at https://github.com/inutard/matrix-factor.

Software Engineering Intern (Summer 2013)

Google, Los Angeles

• Created a stochastic model for proposed ads by potential advertisers. Purpose of the model was to predict an ad's performance (cost, clicks, etc.) before the ad is released to the public. Found evidence that the model would be feasible in terms of computation as well as accurate. Additionally created pipelines to automatically validate accuracy of model.

ScienceOne Teaching Assistant (Fall 2012 - Spring 2013)

ScienceOne Programme, UBC

• Was the mathematics TA for ScienceOne. Responsibilities include grading homeworks and holding review sessions every week.

Science One Module Design (Summer 2012)

Mathematics Department, UBC

Working with Prof. Fok-Shuen Leung (UBC), I was part of a group of students
that helped create a new math curriculum for Science One. Science One is a
rigourous first year programme that combines Math, Physics, Chemistry, and
Biology into a single yearlong course.

Science One Research Project (Spring 2011)

Science One Programme, UBC

 Partnered research project which culminated in a paper published to the UBC cIRcle Repository.

CONTESTS

ACM-ICPC Programming Contest World Finals (2013) - 76th globally U. Chicago Invitational Programming Contest (2013) - Bronze Medal International University Physics Competition (2012) - Bronze Medal

ACM-ICPC Programming Contest (2012) - 3rd in Pacific NW Region ACM-ICPC Programming Contest (2011) - 17th in Pacific NW Region Google AI Contest (2011) - 7th in Canada IT-BHU Codefest Mathmania Contest (2010) - Top 15

HONOURS

Rick Sample Memorial Scholarship (2013)

W.H. MacInnes Scholarship (2012) - Highest standing in Math/Physics

NSERC USRA Research Award (2012)

Trek Excellence Scholarship (2011, 2012, 2013) - Top 5% in year of study

President's Entrance Scholarship (2010)

BC Provincial Examination Scholarship (2010) - Top 20 in Province

EXTRA-CURRICULAR

Computer Science

• UBC ACM Team (2011 - Present)

Mathematics

• UBC Math Circle Organizer (2012 - Present)

Sports

- Sponsorship by DC Badminton (2012 Present)
- Line judge for international badminton competitions Canada Open, World Senior Badminton Championships, etc. (2008 Present)