

## EDUCATION

- University of Waterloo (UW), Canada** 09/2010 – Present  
Master Candidate of Mathematics, Computer Science, Co-op Program. GPA: 86.14/100.
- The Hong Kong Polytechnic University (HKPU), Hong Kong** 09/2005 – 06/2010  
Bachelor of Science (Honors) in Computing, with *First Class Honors*. GPA: 3.53/4.00.

## QUALIFICATIONS

- **Technique** Python, C/C++, Java, C#, Objective-C, Matlab, SQL, UML, ASP.NET, AJAX, Git, Perforce, Ruby and RoR, Linux, XML.
- **Soft Skills** Algorithm, problem solving, fast learning.

## EXPERIENCE

- LTE Development Intern** 05/2011 – 12/2011  
*Research In Motion, Waterloo, Canada*
- In charge of the design and implementation of a parser with Python and C++ that takes test logs, codes and header files as inputs, and produces test scripts for automatic testing.
  - Responsible for creating a test client with C# and Python, which accepts tests from scheduler, sets up test environment, and starts tests automatically.
  - Assisted in LTE validation functionality by generating new threads to verify and measure the communication at physical layer.
- Software Developer** 06/2008 – 05/2009  
*IT Department, National Institute of Aquatic Resources, Technical University of Denmark, Denmark*
- In charge of the design and implementation for research GIS website *Fiskepleje* and five other research websites with C#, AJAX, ArcGIS Server, and Google APIs (including Google Earth, Maps, Visualization, Charts).
  - Responsible for KML function development of the commercial product *Ship Information System (SIS)* with C#.
  - Revised and upgraded the GIS tool *VSTOOL* and added new function with C#.
- Dababase Designer** 07/2007 – 08/2007  
*Department of Nephrology, Peking University First Hospital, Beijing, China*
- Designed a new user interface and revised the relational table with MS Access and SQL for medical record database.

## PROJECTS

- **Compiler Construction (UW CS644 Course Project)** Constructed a compiler with Python for a Java-like language that implements scanning, parsing, type checking, runtime organization, and code generation, and finally outputs i386 assembly language.
- **Optimize Database Implementation (UW CS648 Course Assignments)** Modified the source code of PostgreSQL to compress the prefix key in internal data structure, and optimize the query processing.
- **Image Inpainting (UW CS870 Course Project)** Realized the Level-Set function model with Matlab to provide a user interface that allows user to choose a damaged range in a grayscale image, and auto-fills the broken part.
- **GAE Sites Development** Established GAE sites with Python and Javascript to provide a cube-attack cryptography calculator (*UW CS758 Course Project*), and a news-comments classifier (*UW CS848 Course Project*).
- **Advanced Geographical Information System (Final Year Project at HKPU)** Proposed and implemented an advanced GIS that provides a portable product, allowing user to collect environmental data along everyday route, upload and share the data in server, and retrieve the analysis and personal health report.
- **Other Projects** Donation Database System by C#, Course Enrolment System by RoR, Simulated Unix by C, self-designed GUI OS by VB, Air-ticket Booking System by Java, Interactive Virtual Reality 3D Game by OGRE and C++, small iPhone apps by Objective-C.

## ACTIVITIES

- **Student Mentor** of CStar Program, Women in Computer Science at UW, 2011.
- **Technique support of IT Department**, Chinese Student and Scholar Association (CSSA) at UW, 2011.
- **General Secretary** of Society of Computing Studies 2007, **Cultural Secretary** of HKPU Hall Students' Association 2005.
- **Student coordinator** in Cambodia Youth School Service 2010, Gansu (China) Orphanage Project 2008 – 2009.

## AWARDS

- Finalist for Canada Google Anita Borg Memorial Scholarship, 2011.
- Gold Prize for SPECIAL All-round Student Awards of HKPU, 2010.
- Seymour Cray Outstanding Placement Awards, 2009.
- Active Participant in IBM DB2 UDB Inter-University Programming Contest in Hong Kong, 2008.
- E.F. Codd Scholarship for Outstanding Students, Hong Kong CMA & Donors Scholarship, Hong Kong Computer Society Scholarship 2006/07; HKPU Mainland Students Scholarship 2005 – 2010.

– References are available upon request –