

Li Xuanji

1B Honours Computer Science
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Summary of Qualifications

- Proficiency in Python and Javascript developed through internship and side projects.
- Linux skills developed through installing and configuring Ubuntu for personal use.
- Experienced with using LaTeX for assignments and academic journal submissions.
- Familiar with C, C++, Racket Scheme, Haskell, MongoDB, TI-BASIC, Tcl and LaTeX.

Work Experience

Junior Software Developer - Nugit

May 2014-Present

- Implemented automated ad performance analysis in Python.
- Wrote and styled corresponding front-end visualizations.
- Learned flask, pandas, backbone layoutmanager, svg.js, mongodb.
- Contributions recognized by CEO as critical to product's successful launch.

Informatics Coach - NUS High School

Feb-Mar 2014

- Trained students for National Olympiad in Informatics by running weekly contests.
- Prepared lessons on basic algorithms and data structures.

Education

University of Waterloo

Sept 2014

Candidate for Bachelor of Computer Science.

NUS High School

2006-2011

Graduated with Honours in Physics, Chemistry, Mathematics and Majors in History.

Relevant Courses

- Designing Functional Programs (Advanced)
- Competitive Programming

Relevant Class Projects

- Developed an interpreter for a subset of Racket in CS 146.
- Wrote a role-playing game from scratch and developed art for it as a high school senior-year project.

Relevant Research Projects

- Extended a C static analysis framework and a symbolic execution engine targetting LLVM bytecode. Demonstrated 17x speedup over previously published results for selected test cases by avoiding combinatorial explosion.
- Developed and tested software for directional wireless localization, using ambient WiFi and a directional antenna to determine user's position and bearing.

Awards/Activities

Debate Team

- Held position of President.
- Planned tournament schedule and handled registration.
- Trained junior team members on basic debating skills.

Academic Awards

- University of Waterloo President's Entrance Scholarship.
- Singapore Science and Engineering Fair 2011 Gold Medal.
- National Olympiad in Informatics 2011 Silver Medal.

Hackathons

- Headlights - YHack 2014 second place. Helmet mounted Bicycle turn signals controlled by arm signals.
- Myourtual Reality - BoilerMake 2014 Google Sponsor Prize. Control 3D objects in a augmented reality platform.
- Eyedentify - HackMIT 2014 Qualcomm Sponsor Prize. Image and text recognition for Google Glass.

*Side Projects***Interactive SICP**

xuanji.appspot.com/isicp/

- Interactive online version of the classic CS textbook Structure and Interpretation of Computer Programs where users can edit and run code fragments.
- Project was voted to #1 spot on Hacker News.

libgit2.js

github.com/zodiac/libgit2.js

- Javascript port of the libgit2 git library, compiled using Emscripten.
- Includes commit tree and directory visualizer.