Li Xuanji

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github.com/zodiac
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Education

University of Waterloo *Sept 2014-2019*

Candidate for Bachelors of Computer Science (Honours, Co-Op)

National University of Singapore **Jul-Nov 2011**

Read CS1101S Programming Methodology, an accelerated introduction to computer science. Based on MIT's old 6.001 course and uses Structure and Interpretation of Computer Programs as a textbook.

NUS High School **2006-2011**

Graduated with Honours in Physics, Chemistry, Mathematics and Majors in History. Ranked 11th in country for International Olympiad in Informatics selection tests and received Silver medals for the Singapore Physics Olympiad and Singapore Chemistry Olympiad.

Side Projects

Interactive SICP xuanji.appspot.com/isicp/

Used javascript web workers to create interactive online version of the classic CS textbook Structure and Interpretation of Computer Programs. Project was voted to #1 spot on Hacker News.

EarthMap

Like Skymap, but for Earth! Uses phone's accelerometer and compass to control direction Google Maps 3D view. Written in 24 hours for AngelHack.

libgit2.js github.com/zodiac/libgit2.js

Javascript port of the libgit2 git library, compiled using Emscripten.

ankiResource github.com/bombpersons/ankiResource/

A Django application that lets users share flashcard decks and individual cards for learning Japanese.Automatically parses and de-conjugates sentences for search with the MeCab morphological analyzer.

Work Experience

Nugit **May 2014-Present**

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

NUS High School **Feb-Mar 2014**

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

Bukit View Secondary School **Feb-Mar 2014**

Coached students for national-level debate tournament.

DSO National Laboratories **Oct-Dec 2009, 2010**

Extended a C static analysis framework and a symbolic execution engine targetting LLVM bytecode. Demonstrated 17x speedup over previously published results for specially crafted test cases by mitigating combinatorial explosion.

Institute for Infocomm Research **Mar-Nov 2009**

Developed and tested software for directional wireless localization, using ambient WiFi and a directional antenna to determine user's position and bearing.

Skills

Experienced in Python and Javascript. Some experience in C, C++, Racket Scheme, Haskell, TI-BASIC, Tcl and LaTeX. Intermediate Linux user - runs Ubuntu with a tiling window manager and can compile the occasional dependency. Longtime Dvorak (keyboard format) fan.