Li Xuanji

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github.com/zodiac
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Work Experience

Junior Software Developer - Nugit   **May 2014-Present**

- Implemented automated ad performance analysis in Python.

- Wrote and styled corresponding front-end visualizations.

- Stack: flask, pandas, backbone layoutmanager, svg.js, mongodb.

Informatics Coach - 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.

Side Projects

Interactive SICP   xuanji.appspot.com/isicp/

An 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.

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.

Research

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 selected test cases by avoiding 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.

Hackathons

Headlights - YHack 2014 **2nd place**

Helmet mounted Bicycle turn signals controlled by arm signals and the Myo

Myourtual Reality - BoilerMake 2014 **Google Services Runner-up Prize**

Control 3D objects in a augmented reality platform

Eyedentify - HackMIT 2014 **Qualcomm - Best Use of Vuforia**

Image and text recognition for Google Glass

Education

University of Waterloo **Sept 2014**

Candidate for Bachelors of Computer Science (Honours, Co-Op). Average: 94%, GPA: 4.0/4.0.

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

Read CS1101 Programming Methodology, an accelerated introduction to computer science.

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.

Skills

Proficient in Python and Javascript. Intermediate Linux user. Some experience with C, C++, Racket Scheme, Haskell, MongoDB, TI-BASIC, Tcl and LaTeX.