

Li Xuanji

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EDUCATION

UNIVERSITY OF WATERLOO

BCS Computer Science 2019
President's Scholarship
Cumulative Average: 89%
Putnam Top 350

COURSES

Operating Systems
Principles of Programming Languages
Concurrent and Parallel Programming
Real Analysis
Lebesgue Integ. & Fourier Analysis
Groups & Rings
Linear Programming
Combinatorial Optimization
Graph Theory
Took all available advanced courses in
Linear Algebra, Calculus,
Combinatorics, Optimization,
Compilers, Algebra, Statistics

NUS HIGH SCHOOL

SAT: 2340 / 2400
President of Debate Club
Singapore Science & Eng. Fair Gold Medal
Australian Informatics Olympiad Gold Medal
American Invitational Math Exam Qualifier
Physics, Chemistry Olympiads Silver Medals

SKILLS

Languages python • javascript • C •
racket • scala • elixir • C++
Web Stack react • nodejs • flask •
elixir/plug • django
Others pandas • linux • git •
react-native

HACKATHONS

BostonHacks 3rd place
BostonHacks KPCB Prize
BostonHacks 1517 Grant
YHack 2nd place
YHack Intel API Prize
BoilerMake Qualcomm API Prize
HackMIT Google API Prize

EXPERIENCE

FACEBOOK | PRODUCTION ENGINEER INTERN

MAY - SEPT 2017

- Cold Storage - custom hardware for data backup
- Rewrote integration test infrastructure to run on every commit
- Wrote Thrift server and clients to control disk and enclosure state

AIRBNB | DATA INFRASTRUCTURE INTERN

JUN - AUG 2016

- Worked on Airflow, an open-source task scheduler
- Replaced old Hive sensor and programmatically rewrote 800+ call sites
- Implemented and compared git FUSE filesystem vs POSIX file locks
- Received commit rights after Apache Software Foundation vote process

QUIZLET | PLATFORM ENGINEER INTERN

FEB - MAY 2016

- Responsible for running PHP codebase on HHVM
- Reverse-engineered undocumented PHP features, HHVM config flags, HHVM extension API, libdwarf header changes and many other things
- Root-caused corrupt data bugs to undefined behaviour in MySQL and memcached extension calls

DIAMOND.IO | SOFTWARE ENGINEER

MAY - AUG 2015

- Personal search and file hosting startup
- Set up backend with nodejs and postgres with full-text search
- Wrote content-addressable file storage backed by S3 as well as client-server synchronization

NUGIT | JUNIOR SOFTWARE DEVELOPER

MAY 2014 - FEB 2015

- Full-stack developer on a small (<5 persons) engineering team
- Implemented automated adwords performance analysis in Python
- Wrote and styled corresponding front-end visualizations
- CEO recognized my contributions as critical to product's launch

PROJECTS

BABELGAMES

babelgames.io

- Language learning game with native content mined from movie subtitles
- Built with react and elixir (plug)

INTERACTIVE SICP

xuanji.appspot.com/isicp

- Interactive online CS textbook
- In-browser interpreter allows users to edit and run code fragments
- Voted to #1 spot on Hacker News, >600 stars on github
- Core engine adapted to teach class at UC Berkeley

SYMBOLIC EXECUTION

github.com/zodiac/kee-nush

- Extended a C static analysis framework targeting LLVM bytecode
- Up to 17x speedup over previously published results

19X19

airflow.xuanji.li:3001

- Online baduk/Go (board game) platform built with socket.io
- Real-time chat, move history, undos, spectators and lobby