

EDUCATION

University of Michigan, Ann Arbor, MI Aug. 2019 - May. 2021
Bachelor of Computer Science

Selected Coursework: Advanced Compilers; Program Synthesis; Introduction to Operating Systems; Compiler Construction; Programming Languages;
GPA: 3.84

Shanghai Jiao Tong University, Shanghai Sept. 2017 - May. 2021
Bachelor of Electronic and Computer Engineering GPA: 3.55

SKILLS

Front-end skills: Proficient in HTML/CSS/Javascript, Bootstrap; experience in jQuery, vue.js.
Back-end skills: Proficient in C/C++, Python (Django); experience in PHP, nginx, uwsgi, Apache.
Database skills: Experience in MySQL.

RESEARCH EXPERIENCE

Research Assistant, *prof. Cyrus Omar*, University of Michigan - Future of Programming Lab Nov. 2019 - present

Worked on a paper for a gradual bidirectional typing inference system - type hole inference.

Developed undo/redo and history recording features for Hazel, a live functional programming environment featuring typed holes.

Designed and implemented a history panel, which was used for EECS 490 teaching work in UM. rrsection **Research Assistant**, *prof. Scott Mahlke*, University of Michigan May 2020 - Jul. 2020

Learnt and wrote optimization path by LLVM.

Implemented genetic algorithm to find optimized combination of flags for gcc. rrsection

ENGINEERING EXPERIENCE

Course Project, *Compiler for Decaf*, EECS 483 Compiler Construction 2019 Winter

Implemented and optimized a compiler for Decaf (a strongly-typed, object-oriented language with support for inheritance and encapsulation), written in C++ and compiled Decaf program into MIPS assembly program.

Implemented a full-stack compiler from lexical analyzing to code generation with clear static, link and run-time error reporting.

Optimized compiler by register allocation improvement, dead code elimination, constant folding, subexpression elimination, constant propagation and forward copy propagation.

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Course Project, *Network File System*, EECS 482 Operating System 2019 Winter

Implemented a file system featuring encryption, authentication, failure tolerance and concurrency. rrsection

Lead Programmer, *Online Visual Novel*, SJTU Network and Information Organization February 2019 - May 2019

Implemented a visual novel featuring multiple story lines and endings, shopping store, archiving, achievement, HP systems.

Designed and built front-end pages (Html/CSS/JS).

Developed the back-end by Django, created database model and deployed it in the cloud server (Ubuntu).

Revised it into a light framework and released on github. rrsection

AWARDS

Bronze, *ICFP 2020*, Student Research Competition Aug. 2020

Champion, *12th Annual VEX U Robot Skills Challenge World Championship*, Louisville Apr. 2019

Over 30,000 people including more than 1,650 teams from 40 nations participated.

- Designed and constructed over 5 versions of robots for competitions with other 8 teammates.
- Wrote daily work log and engineering sheets for the team.

Second Place, *12th Annual VEX U Robot World Championship*, Louisville Apr. 2019

Champion, *VEX Robotics Asia Open*, Ningbo, Zhejiang Feb. 2019

Robot Awards, *Summer Design Expo Best Technology Award*, UMSJTU JI Nov. 2018

Scholarship, *Undergraduate Excellent Scholarship*, Shanghai Jiao Tong University 2017-2018