Yihong Zhang

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SKILLS

- Algorithm Design • Object-Oriented Programming • Functional Programming • Web Development
- Languages: Scala, Java, Python, JavaScript, PHP, Haskell, Coq, Racket, Standard ML, LaTeX.

EDUCATION

University of Washington Seattle

B.S. in Computer Science, GPA 3.94/4.00 *Sept. 2018—Est. Jun. 2021*

- Domain of interests: Programming Languages, Software Engineering, Algorithms.
- Selected coursework:
  - Algorithms and Theory: CSE 421 Introduction to **Algorithms**, CSE 431 Introduction to the **Theory of Computation**.
  - Software Engineering and Programming Languages: CSE 507 **Computer-Aided Reasoning** for Software Engineering, CSE 402 Design and Implementation of **Domain Specific Languages**.

EXPERIENCES

Codeus Technology Inc. Beijing, China

Software Development Intern *Aug. 2019—Sept. 2019*

- Built a Python 3 analyzer that provides correction hints for newbie programmers using **Java**.
- Developed an extensible **compiler** front-end framework at the core of the analyzer.
- Achieved huge improvements in offering precise hints under more complex cases compared with previous Regex-based tools.

Thinktown Education Inc. Hangzhou, China

Fullstack Intern *Jul. 2018—Nov. 2018*

- Initiated a word quiz system for students status tracking with **Laravel** and **Vue.js**.
- Reduced ∼$100k/yr budget by automating mentors' manual work.

PROJECTS

Realm.js

- Realm.js is a **JavaScript** framework that employs Elm architecture for frontend **functional reactive programming** (FRP). Under Realm.js framework, developers can keep their models pure in an intuitive way, which allows them to focus on the transition of data through various events, instead of managing side effects manually.

Handlebars

- This is one of the courseworks in CSE 402. Handlebars is an extensible **frontend templating language** that compiles to JavaScript. It consists of a parser for the templating language, a compiler that compiles such templates into JavaScript functions, and an extensiblility mechanism of helpers with some predefined helpers (e.g. conditionals, iterations).

dttp

- dttp is a **proof assistant** written in **Scala** modeled after MiniCoq. It provides a basic **dependent type checker** under Curry-Howard Isomorphism which makes it possible to prove theorems in predicate logics. It's still being actively developed.

HONORS

Rank 5, International Collegiate Programming Contest Pacific NW Region *Nov. 2018*

Rank 2, International Collegiate Programming Contest UW Qualification Round *Oct. 2018*

First Prize, National Olympiad in Informatics in Provinces, Zhejiang, China *Nov. 2016*

Dean's List, University of Washington *Dec. 2018–Present*