

# MIKE HE

<https://ad1024.space>

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## EDUCATION

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**University of Washington, Seattle**

Sept. 2018—Est. Jun. 2022

*B.S. in Computer Science*

- Cumulative GPA: 3.92
- Interests of Studies: Programming Languages - Type Theory & Formal Verification. Japanese Studies.

### Selected Courses:

- **CSE 332** Data Structures & Parallelism
- **CSE 402** Introduction to Domain-Specific Language
- **CSE 507** Computer-Aided Reasoning for Software

## SKILLS

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<b>Languages</b>	Python3, Java, Golang, Rust, Agda, Haskell, HTML, L <sup>A</sup> T <sub>E</sub> X
<b>Skills</b>	Object-Oriented Programming, Functional Programming, Algorithm Design
<b>What's more?</b>	Violin (Performing Level certified by Central Conservatory Of Music)

## EXPERIENCE

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**Troph**

Dec. 2019—Now

*Backend Developer Intern*

*Remote*

- Being responsible for developing server Backend and populate REST API for the Troph IRC website.

**Relay**

Oct. 2019—Now

*Research Assistant*

*Seattle, WA*

- A High-Level Intermediate Representation for tvn stack.
- Being responsible for the evaluation infrastructure and performing efficiency analysis for the compiler.

**UW Solar Data Research**

Jan. 2019—Sept. 2019

*Undergraduate Researcher*

*Seattle, WA*

- Developed an online panel for visualizing data collected from solar panels deployed around UW campus; Deployed the system to the CEI Testbeds, tested for its stability and optimized its performance.

## PROJECTS

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**Realm.js**

A functional reactive programming library designed for frontend developers. Written in TypeScript, the library combines the design of Elm and RxJs. It adopts a functional imperative and reactive hybrid paradigm of frontend programming. It is the final project of CSE 402 (Domain-Specific Language).

**Sager**

*On Github*

A Demonic Graph Synthesizer (data structure synthesizer) that aims for worst-case performance of graph-related algorithms (e.g. SSSP). It uses ROSETTE as the solver for synthesizing the core structure and calls a scaler for generating larger graphs. It is the final project of CSE 507 (Computer-Aided Reasoning for Software).

## HONORS

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- **JASSO Scholarship**, Waseda University *Jun. 2019*
- **Annual Dean's List**, University of Washington *2018—2019*
- **First Prize**, Software Engineering Contest for High School Students (Beijing) *Apr. 2017*
- **Second Prize**, National Olympiad in Informatics (Beijing Regional) *Dec. 2016*