JINYANG YAO

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EDUCATION

The University of British Columbia, BC, Canada   2017 – 2021

B.S. Honor in Computer Science, Minor in Mathematics, Avg 86.9/100, GPA 3.95/4.33

EXPERIENCE

Flint Healthcare Fullstack developer   *Vancouver, Canada*, 2022 Jan -2024 May

Flint maintains a scalable platform that helps US hospitals to source, licence, and onboard international talents.

- Designed and implemented a CQRS and event sourcing based architecture in Haskell.
- Implemented and maintained various business services in Haskell and Elm.
- Maintained the kubernetes cluster.
- Maintained the CI and deployment process with docker, nix and github action.
- Implemented tools to improve automation of development and operation processes.
- Interviewed software developer candidates.

Chongqing University Intern   *Chongqing, China* , 2019 Summer

Joined a project that aims to Optimize the thermal efficiency of building designs.

- Implemented a program to select the optimal building design that satisfies some multi-objective constraints.
- Implemented a web platform that collects, manages, and displays temperature data from sensors installed across provinces.

UBC CS honor program   2020 - 2021

Using machine learning technique (semi-supervised learning) to assess first year programming assignments.

PERSONAL PROJECTS

cppparsec   `github.com/ailrk/cppparsec`

A C++ monadic parser combinator inspired by Haskell's Parsec library.

Blgol60   `github.com/ailrk/blgol60`

A Haskell implementation of Algol60.

SKILLS

- Programming languages: Experienced in Haskell, Elm, F#, Typescript, Python, C++; comfortable with C, C#, Racket, Matlab, Erlang
- Web development: RESTFUL api designs, CQRS, Event Sourcing, DDD modeling, Postgresql, RabbitMQ, React, Elm, Vue, System design
- Programming language theory: Denotaional semantics, Lambda Calculus, Type theory, Abstract machine
- Compiler: Embeded DSL, External DSL, Parsing techniques, Familiar with various program analysis techniques and backend optimizations.
  DevOps: Github actions, nixbuild.net, cachix, Docker, ssh
- Tools: Git, CMake, Makefile, Nix
- Platforms: Linux system programming
- Team: Worked with teams that used Slack, Notion, Bitbucket,
- Others:
  - English - Fluent, Chinese - Native.
  - Personal site: https://ailrk.github.io/home