Experience

Frontend Engineer, Gllue Software, Shanghai, China

2020/11 - 2022/03

- + Developed Web applications and WeChat mini-programs using React and TypeScript.
- + Designed and developed a view layout system on canvas to support in-app screenshots.
- + Developed features for a UI builder framework, a JSON form engine, and an image-rendering service.
- + Built a light-weight HTML5 encrypted video streaming player to prevent downloads.
- + Participated in the development and integration of an OAuth 2.0 identity service.
- + Maintained online documentations using TypeDoc, GitLab, Docker and ArgoCD.

Electron Developer, Étude, Atlanta, GA

2019/09 - 2020/03

+ Built features such as table of contents parser, persistent word highlighting, etc.

Web Developer, Georgia Institute of Technology, Atlanta, GA

2019/08 - 2019/12

+ Participated in the development of the MEAN-stack mid-term survey application.

Education

University of Illinois Urbana-Champaign, Champaign, IL

2022/08 - Present

M.C.S. in Computer Science

Georgia Institute of Technology, Atlanta, GA

2015/08 - 2019/12

B.S. in Computer Science, Minor in Physics, GPA: 3.97/4.0

Projects: //github.com/GalMunGral

/telescope: SOCKS-based Split Proxy [C, Python]

2021/04

+ A stable anti-censorship tool for bypassing the Great Firewall, implemented using libuv.

/michelangelo: Web UI without DOM and CSSOM [TypeScript]

2022/05

- + A low-level UI framework that implements layout, drawing and event handling on canvas.
- + //galmungral.github.io/michelangelo

/replay: Front-end Framework and Bundler [TypeScript, JavaScript]

2020/05

- $+ \ {\tt React-like} \ {\tt famework} \ {\tt with} \ {\tt in-place} \ {\tt diffing}, \ {\tt non-blocking} \ {\tt rendering}, \ {\tt hydration} \ {\tt and} \ {\tt dependency} \ {\tt tracking}.$
- + Webpack-style bundler with support for dynamic imports, code splitting and ESM-mode dev server.

/react-teletype Interprocess React Renderer [TypeScript]

2021/05

+ React renderer for running apps on the server side or in a shared worker to skip reinitialization.

/hanbun-lang: An Esoteric Programming Language [PureScript, TypeScript]

2021/05

- + An object-oriented stack-based language, with syntax based on Classical Chinese.
- + //galmungral.github.io/hanbun-lang

/sketchpad: A Simple Compiler for a High-Level Language [JavaScript]

2022/04

- + A language with Lisp syntax, C-like semantics and a compiler for a hypothetical architecture.
- + //galmungral.github.io/sketchpad

/turing-machine: Implementation of Turing's Universal Machine [Haskell, Common Lisp]

2021/12