

[simon@rodrig.dev](mailto:simon@rodrig.dev)

# Simon Rodriguez

📍 Massachusetts, USA or Remote



## Education

### University of Notre Dame

Bachelor of Science, Computer Science

May 2022 • Notre Dame, IN

GPA: 3.48

## Programming Languages

JavaScript/TypeScript, Python, C/C++, sh/bash, SQL, Java

## Frameworks & Technologies

Svelte/SvelteKit, React, Node.js, MySQL, Docker, Git, Figma

## Related Experience

### Open Source Software Development

*Coursework* • Spring 2022

- Coursework involved forming a group of four members and creating a public open source project in order to study various topics such as software development, community outreach and engagement, code licensing, and the issue/pull request workflow.
- Project was an audio streaming server utilizing HTTP Live Streaming (HLS) to stream audio files to an unlimited number of clients, resembling internet radio.
- Developed and maintained a static landing page for the project using 11ty, a JavaScript static site framework.

### Windows 3.0 Solitaire Solver and Player

*Project* • Spring 2022

- Task was to reverse engineer the Windows 3.0 version of the popular card game, Solitaire, and develop software which would read game's state from memory and automatically solve and play the game. Software reads game state using Windows API calls to read a process's memory, locating and decoding the relevant section in memory.
- Using the game's state, a "solver" algorithm was developed using recursion with backtracking. Includes a "guided solver", creating a Dear ImGui window with instructions on the moves needed to win the game. Automatic solver also included, which plays the game automatically for the player using keyboard inputs.

### Teaching Assistant, Systems Programming

*Work Experience* • Spring 2022

- Entry level course for 2nd-year Computer Science students. Course topics include: basics of Linux command-line, introduction to the C programming language, arrays, pointers, Makefiles & build systems, structs, classes, and more.
- Assisted with students with general programming concepts of style, readability and clarity and engaged in pair programming activities to facilitate learning of concepts.