

Simon Rodriguez | Frontend Developer

esimonrodrig@gmail.com | simon@rodrig.dev
Massachusetts, USA or Remote (EST)

Education

University of Notre Dame

Bachelor of Science

Major: Computer Science

Notre Dame, IN

May 2022

GPA: 3.48

Skills

Spoken Language:

English (Native), Spanish (Fluent/Bilingual)

Programming Languages:

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

Frameworks & Technologies:

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

Experience

Open Source Software Development

Notre Dame, IN

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

Notre Dame, IN

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

Notre Dame, IN

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.

Image Hosting Website

Notre Dame, IN

Coursework, Modern Web Development

Fall 2021

- Semester-long project in order to learn the fundamentals of web development and its evolution into modern solutions. Our project was to build an image hosting website, similar in nature to **Imgur**.
- Frontend of website was built using **React** with **TypeScript**. I primarily focused on the frontend portion, also creating the design and implementing using **SCSS**.
- The backend for the website was created using **Back4App**, a hosted solution for the **Parse** platform. Our frontend leveraged the hosted database to keep track of users, which images they had uploaded, folders.