DARRYL ABBATE

darryl.cx linkedin.com/in/darrylabbate

EDUCATION

University of New Orleans - New Orleans, LA

2018 - 2021

Bachelor of Science in Computer Science, summa cum laude (GPA 3.96/4.00)

SKILLS

C, Git, Assembly, Java, Python, Perl, Lua, Shell, Haskell, SQL, HTML, CSS (Sass/SCSS), JavaScript

PROJECTS

Riff · Programming language

riff.cx · github.com/riff-lang/riff

- Created a dynamically typed scripting language
- Designed and programmed a bytecode interpreter (virtual machine) in C
- Improved interpreter performance to exceed speeds of other fast interpreters, such as Lua, by optimizing the virtual machine implementation

Riff Playground · Online programming environment

riff.run · github.com/riff-lang/playground

- Implemented an interactive online demo for Riff which runs completely client-side
- Enabled Riff programs to be executed directly in the browser by compiling the Riff interpreter to WebAssembly, using the Emscripten SDK
- Integrated sharable links to Riff programs without the use of a backend database by utilizing lossless data compression and Base64 to encode text data directly into URLs (anchor links)

EXPERIENCE

Private Tutor · Varsity Tutors (Online/Contract)

2020 - Present

- Tutored high school and undergraduate computer science students in programming and software design courses
- Guided students to an improvement of at least one letter grade during their semester

Student Intern • Entergy (New Orleans, LA)

2018 - 2019

- Reduced power plant launch operation costs by \$600K by developing an automation solution for configuring power plant software
- Streamlined collaboration and productivity within our team by championing the use of various software