

DARRYL ABBATE

darryl.cx

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EDUCATION

University of New Orleans · *New Orleans, LA*

Graduated May 2021

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

SKILLS

C, Git, Assembly, Java, Python, Perl, Lua, Shell, 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.
- Optimized virtual machine implementation during development, improving interpreter performance to exceed speeds of other fast interpreters, such as Lua.

Riff Playground · *Online programming environment*

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

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

EXPERIENCE

Private Tutor · Varsity Tutors · *Online/Contract*

Jan. 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*

Oct. 2018 – Aug. 2019

- Developed a process automation solution for configuring power plant software, saving the company \$600K in outsourcing costs when launching a power plant.
- Championed the use of various software to streamline collaboration and productivity within our team.