Job Hernandez Lara

Seattle, WA
✉ *hj93@protonmail.com*
🌐 *jobhdez.github.io*
in *jobhdez*
🐙 *jobhdez*

Skills

Languages	Common Lisp, Python, JavaScript, Haskell, C++
Tech	Django, DjangoRestFramework, ReactJS, Docker, AWS, Linux command line, Git, Emacs
Other	Solid engineering skills, Experience deploying web apps with docker and AWS

Projects and Open Source Participation

March 2024 - current

LLVM, *Open Source Contributor, A compiler used by thousands of devs and big companies such as Google, Apple, Nvidia*, written in C++
- Added and shipped 9 math floating point functions, increasing coverage of the math C library by 3.7 percent. See contribution here and here. See blog post here.
- Recognized for my fmaximum and fminimum functions on the LLVM weekly newsletter.
- Explored and worked inside of an unfamiliar, large, and complex codebase to enhance compatibility with the new standard (C23) for the C programming language.

Dec 2023 - March 2024

SchemeWeb, *Author, An API and SDK, written in Python, Django, TypeScript*
- Implemented a Scheme interpreter. This involved recursion over a tree data structure and gave me a better understanding of computation. See project here. See blog post here.
- Desgined and implemented API endpoints by thinking about the workflow of users.
- Implemented an SDK in TypeScript that allows users to integrate a Scheme programming interview engine into their apps.

April 2023 - June 2023

Coalton, *Open Source Contributor, A production quantum computing language, written in Common Lisp*
- Added automatic differentiation (calculus) to Coalton programming language. See original PR here. See merge here. See blog post here.
- Picked up Coalton quickly and made a non trivial contribution without hand holding.

May 2023

Social Media RESTful Web Service, *Author, A social media web service where people share linear algebra expressions, written in Python3, Django, Redis, Celery, RabbitMQ*
- Developed a linear algebra library and linear algebra interpreter allowing the social sharing of linear algebra expressions. See Project on Github.
- Implemented back-end concepts such as caching, message queue, distributed task queue.

Nov 2022- Jan 2024

Compiler Explorer, *Author, A full stack web application where users can explore the generated code associated with computer science concepts, written in Common Lisp, JavaScript, ReactJS, MUI, Postgres, Docker, AWS*
- Developed and deployed a compiler web service using docker and AWS. See Project.
- Implemented 4 compilers that allow users to explore computer science fundamentals.

Interests

I like to study advanced math.

I write a technical blog: How Facebook scaled Memcache, How the Internet works, and How to deploy a Lisp Server to AWS.