

Christopher P. Vasquez

Metairie, LA | (504) 236-4327 | chrispv@cox.net | chrispvasquez.github.io

EDUCATION

Louisiana State University (LSU), Baton Rouge, LA

May 2023

Master of Science, Electrical Engineering

GPA: 4.0

Bachelor of Science, Computer Engineering

Bachelor of Science, Computer Science

Related Coursework: Computer Architecture, Multiprocessor Programming, GPU Programming

EMPLOYMENT

Research Assistant (CPU/GPU Acceleration with R)

January 2022 – Present

Louisiana State University, Baton Rouge, LA

- Assisted with the development of a statistical, server-side application funded by the National Science Foundation
- Researched and implemented CPU acceleration for R package ([MLMA](#))
- Researched and implemented GPU acceleration with LightGBM for R package ([MMA](#))

Software Engineer (iOS with Swift)

July 2021 – December 2021

Louisiana State University, Baton Rouge, LA

- Assisted in developing a mobile, contact tracing application funded by the National Institute of Health
- Developed the Bluetooth connectivity aspect of the app under the scrum development process
- Implemented a custom version of the [Herald Project API](#) to improve contract tracing

Software Engineer Intern (Arduino)

May 2021 – August 2021

Runatek, Dallas, Texas

- Worked on developing the software for a biomedical opioid device known as the SOTIRAS.
- Team leader for the software development of the feedback control loop system of device
- Programmed an Arduino NANO with sensors and actuators to monitor and maintain proper opioid levels

Research Assistant (HPC with Python)

December 2020 – December 2021

Louisiana State University - Center for Computation & Technology, Baton Rouge, LA

- Worked on an open-source HPC Python project ([CMR Project](#)) funded by the National Science Foundation
- Implemented an automated package manager into the project to better handle the building of coastal software
- Designed a plug-in feature to improve the modularity of importing models into the software

SOFTWARE PROJECTS

Personal Website (Javascript with React.js)

September 2022 – Present

Augmented Reality Training Application for Composite Manufacturing (Unity with C#)

August 2021 – Present

Shift Reduce Parser Application (Python)

February 2022

Book Rental Application for Mobile Devices (Flutter with Dart)

August 2021 – December 2021

Movie Recommendation System (Python)

January 2021 – April 2021

Database System for Flight Delays (SQL)

January 2021 – April 2021

Transaction System Utilizing Multicore Programming (C++)

January 2021 – April 2021

Encoder & Decoder via Huffman Coding (ARM ASM)

July 2020

Motion Sensor Traffic Light via Microcontroller (Verilog)

October 2019 - November 2019

SKILLS

Languages: C++, C, C#, Python, Java, Javascript, Swift, Dart, R, SQL, ARM, MIPS, Arduino, MATLAB

Software Technologies: Docker, Git, React.js, Unity, Jupyter Notebook, Flutter, Sparx Enterprise Architect, Asana, JIRA

Other: Bash, Verilog, HTML, CSS, Visual Studio, PyCharm, R Studio, Vim, Xcode, Linux, Windows, MacOS

ACTIVITIES

LSU Center for Computation & Technology, LSU Ogden Honors College