Edwin J. Ortiz

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Website: https://e-ortiz.github.io/ | **LinkedIn**: linkedin.com/in/edwin-j-ortiz/ | **GitHub:** https://github.com/e-ortiz

EXPERIENCE

University of Delaware: VIP Program (High Performance Computing) Newark, DE

HPC Developer / Researcher 2016 – 2018

- Worked with other departments and organizations to refactor and redesign sequential programming algorithms into parallel programs to improve performance and runtime
- Earned proficiency in OpenACC, C, GitHub, refactoring, GPU utilization and parallelization

University of Delaware Newark, DE

Web Developer 2019

- Implemented and created web applications with a back-end database using JavaScript, HTML, and CSS.
- Created full-stack development projects that grant online communication with a friendly UI, allowing seamless updates to the backend developed firebase database

University of Delaware Newark, DE

Computer IT Site Assistant 2016 - Present

- Troubleshooting and diagnosing various hardware and software issues with customer computers
- Create documentation of all customer interactions and PC components through a ticketing software
- Communicate to customers about their troubleshooting status and report key milestones to all clients

PROJECTS

Parallelizing Chemical Shift Prediction

- Achieved a speed-up of over 20x average via reprogramming parallelization with OpenACC and Nvidia GPUs, the biggest achievement being a decrease in rendering time from 10+ hours down to 2 minutes
- PPM_One is used to accurately predict chemical shift predictions in protein structures but was originally too slow to be utilized in a reliable amount of time
- Refactored inefficient coding practices, proceeding to parallelize code to work on multiple threads and cores on a CPU, then moved on to a GPU where we saw even more drastic improvements
- Read more about this project *here* or with the QR code

More project showcases are available on my website and GitHub.

TECHNICAL SKILLS

Languages: Python, JavaScript, HTML, CSS, C++, C, Java, OpenMP, MIPS, SQL, Dr. Racket

Software Technology: GitHub, Eclipse, SQL Developer, Google Firebase, VMware, AnyConnect VPN, Microsoft Office, Virtual Studio

EDUCATION

University of Delaware **Graduation**: February 2020

Bachelor of Science in Engineering

Major: Computer Engineering | **Minor**: Computer Science

Relevant Coursework: Parallel Programming; Data Structures; Operating Systems; Databases; Computer Networks; Software Engineering; Computer Systems Information; Computer Science I, II; Digital Systems; Microprocessor Systems; Calculus I-III; Engineering Mathematics I, II;