Enrique J. González Méndez

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Physical Design Clocking Engineer at Intel – Hillsboro, OR

January 2021 – present

- Leading clock design efforts for next-gen processor, overseeing back-end clock delivery for various sub-systems.
- Reduced turnaround time from two weeks to 3 days for clock delivery workflow by leading global clock EDA tool enhancements, customization, integration and testing with outside vendors and cross-functional internal teams.
- Responsible for STA for high frequency clocks for 2 sub-systems, including identifying slope, setup and hold violations by doing mmmc simulations.
- Active mentor for PhD and Master student interns looking to make a career in the semiconductor industry.
- Delivered high frequency die to die clocks for synchronization between main SoC and compute dies.
- Knowledgeable in clock domain crossing, low-power physical design and static timing analysis techniques.
- Completed 4 full cycle projects in Intel 4, Intel 3, and Intel 18A for client products, enabling 8 subsystems.
- Integrated clock quality indicator trackers into FCL workflow and Splunk using Python, improving project-wide clock quality visibility for 32 clock quality checkers.
- Automated 5 different tasks for global clock RTL flow which involve solving dangles and other issues, integrating it to an internal tool that automatically updates the clock definitions, saving 2 hours per teammate per week.
- Experienced in DRC/LVS, Static Timing Analysis, Place and Route, clock balancing and FEV.
- Knowledge of Synopsys/Cadence Tools Fusion Compiler/ICC2, Innovus, Spectre and PrimeTime.

Software Engineer at CIQA – Hormigueros, PR

January – May 2021

- Directed the development of a web app for validating ISO Standard 14644 compliance for 32+ companies.
- Used React, Express, MySQL, AWS Amplify, AWS Cognito and AWS Lambda for development.
- Accomplished an 80% decrease in report delivery time and a 75% cost reduction.

Software Engineer at Biosecurity Office of PRDH – San Juan, PR

June – October 2020

- Developed and maintained the Bioportal web app that reports all the Covid-19 test results of Puerto Rico's hospitals, airports, public and private laboratories.
- Prepared dashboard queries for different reports regarding Covid-19 cases for all municipalities.

R&D Engineer Intern at ERDC (DoD) – Vicksburg, MS

June – August 2019

- Executed performance analysis on four generative adversarial networks across various datasets, selecting one for further research and development.
- Anticipated an 88% reduction in simulation time with future models, while maintaining a projected accuracy of 94% compared to the current solution.
- Streamlined data preparation by building ETL processes for 6 data sources, ensuring clean and ready data.
- Evaluated model accuracy utilizing the differential results from ABAQUS fluid simulations.

IT Engineer at ABB - Arecibo, PR

January – May 2019

Designed and developed a web application and database for asset tracking with ASP.Net and MS SQL Server, granting visibility to \$90k asset movements per year through the manufacturing plant.

SKILLS

JOBS

Programming Languages: C, C++, C#, Java, Python, JavaScript, HTML, CSS, Swift/SwiftUI, TCL, SQL

Big Data Technologies: Hadoop, Apache Spark, Apache Hive, Dataiku, Splunk

Technologies/Frameworks: React, Angular, ASP.net Core with Entity Framework, Maven, Django, Express

Cloud Service Technologies: AWS Lambda, AWS Cognito, AWS Amplify

Project Management: Agile, Waterfall, V-Model, Kanban, MS Project, Jira/Confluence, ClickUp

EDUCATION

Johns Hopkins University - Whiting School of Engineering

Currently Attending

• M.S. in Artificial Intelligence (Part-Time), GPA: NA

University of Puerto Rico - Mayaguez Campus

B.S. in Computer Engineering, GPA: 3.24/4.00

Graduated

Graduate Level Courses: Big Data Analytics, Computer Vision, Microprocessor Systems, Digital Design