Enoch Nartey

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EDUCATION

ROCHESTER INSTITUTE OF TECHNOLOGY Rochester, New York
Bachelor of Science in Electrical Engineering
September 2019 - May 2024

SUMMARY:

Recent Electrical Engineering graduate with hands-on experience in layout design, programming, and embedded firmware. Successfully completed internships at Applied Materials, contributing to projects such as PVD Silicon Nitride film optimization and RF systems verification. Proficient in LTSpice, VHDL, and C/C++, eager to apply analytical skills and attention to detail in a challenging Electrical Engineer role.

SKILLS:

- Solution-oriented problem-solving, Team collaboration, Adaptability, Active listening.
- Assembly (Asm), C/C++, Excel VBA, JSL, Python, Verilog, VHDL
- Arduino, Cadence Virtuoso, CCS, Intel Quartus Prime, JMP, KLayout, LTSpice XVII, Quartz PCI, MATLAB, MS Office Suite, ModelSim, SiView
- Analog Discovery2, Function Generator, Leica Optical Microscope, Logic analyzers, Microcontrollers (MSP430, Arduino), Multimeter, QUBE Servo 2, Oscilloscope, Soldering

PROFESSIONAL EXPERIENCE:

APPLIED MATERIALS

EMBEDDED FIRMWARE INTERN ***May 2022 – November 2022***

- Contributed to the Rochester IMS-ICAPS team by assisting in firmware development projects, utilizing skills in VHDL and Python to support design and testing.
- Performed LTSpice circuit simulations and analysis for given schematics, improving design accuracy and efficiency.
- Wrote scripts using ROBOT framework for testing in Linux environment, enhancing testing automation.
- Wrote and modified test bench in VHDL and ran simulation using ModelSim for RF systems verification, ensuring test reliability.

APPLIED MATERIALS

PROCESS INTEGRATION INTERN ***July 2021 – December 2021***

- Contributed to the Albany IMS-ICAPS META team at Applied Materials by supporting process integration tasks.
- Conducted DOEs for low Hydrogen, high uniformity PVD Silicon Nitride films for photonics, enhancing film quality.
- Wrote a script to analyze and extract information from Wafer history reports, streamlining data processing.
- Enhanced ease and efficiency in accessing specific information from Wafer history reports, reducing retrieval time and improving data accuracy.

PROJECTS:

E-Soccer Trainer – Multi-Senior Design Project ***September 2023 – May 2024***

- Debugged code in Arduino IDE and selected components for power management to meet modular customer requirement.
- Handled product design and schematic and integrated the components and wiring of individual sensors to main device unit.

Digital Systems Design Project – Design of Digital Systems ***February 2024 – May 2024***

- Designed schematics and layouts standard cells and higher-level cells like 16-bit Adder & BSSUM ARRAY based on GPDK45 using Cadence Virtuoso, Spectre, and Layout XL tools with individual design specifications.
- Performed DRC and LVS checks, ran RTL and Mixed Analog-digital simulations.
- Built testbenches schematics and Verilog scripts to verify functionality.

Interactive Signal Converter – Embedded Systems Design ***November 2023 – December 2023***

- Combine user input via a capacitive touch sensor with A/D-C acquisition and display.
- Written in Assembly and C to convert incoming generated signals based on predefined user options.