

WORK EXPERIENCE

Senior Analog Circuit Designer

NXP Semiconductors

Austin, TX
April 2023 –
February 2025

- Led power management IP development for new product introduction
- Collaborated with SoC architects to develop MCU power architecture & specifications
- Modeled, designed and simulated voltage references, regulators, & detection circuits
- Leveraged circuit design skills to balance tradeoffs between implementations
- Conducted design reviews to confer with other domain experts
- Produced deliverables e.g. schematic, netlist, GDS, LEF, model, liberty, & documentation
- Analyzed aging, reliability, SOA, DFMEA, quality of deliverables

Analog Circuit Designer II

NXP Semiconductors

Austin, TX
May 2021 –
April 2023

- Simulated, optimized, and designed various subcircuits for data converter & power management IP
- Implemented machine learning based optimization flow for temperature sensor IP
- Delivered LVS & DRC clean GDS for multiple 5nm finFET IP
- Modeled SAR and pipeline ADCs in SystemVerilog, VerilogA, & Python
- Scripted verification flows to automate data analysis and visualization

Research & Teaching Assistant

Carnegie Mellon University

Pittsburgh, PA
June 2020-
January 2021

- Designed & laid out a high-speed two-stage comparator in 65nm CMOS
- Developed microelectronic circuits labs to facilitate a transition to an at-home class structure
- Authored testbenches to automate hardware verification

Electrical Engineer

Cosentini Associates

New York, NY
June 2017-
August 2019

- Designed critical power & control systems for >1M sq. ft. of high-rise infrastructure

EDUCATION

Master of Science, Electrical and Computer Engineering

Carnegie Mellon University

Pittsburgh, PA
December 2020
GPA: 3.52/4.0

- Capstone Tapeout: 9.1 ENOB SAR ADC in 28nm CMOS

Bachelor of Science, Electrical Engineering, Bachelor of Science, Music and Sound Recording,

University of New Haven

West Haven, CT
May 2017
GPA: 3.78/4.0

- Dean's List, Presidential Scholarship, Tutoring Award

SKILLS

- Analog & Mixed Signal Circuit Design
- Circuit Simulation & Verification
- Layout & Mask Design
- Software: Virtuoso, Spectre, MATLAB, KiCad, SPICE, Excel
- Programming Languages/HDL: Python, Verilog, Bash, C