Dylan Rosser www.dylanrosser.us

WORK EXPERIENCE

 Senior Analog Circuit Designer NXP Semiconductors 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 	Austin, TX April 2023 – February 2025
 Analog Circuit Designer II NXP Semiconductors 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 	Austin, TX May 2021 – April 2023
 Research & Teaching Assistant Carnegie Mellon University 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 	Pittsburgh, PA June 2020 – January 2021
 Electrical Engineer Cosentini Associates Designed critical power & control systems for >1M sq. ft. of high-rise infrastructure EDUCATION 	New York, NY June 2017 – August 2019
Master of Science, Electrical and Computer Engineering Carnegie Mellon University Capstone Tapeout: 9.1 ENOB SAR ADC in 28nm CMOS Bachelor of Science, Electrical Engineering	Pittsburgh, PA December 2020 GPA: 3.52/4.0 West Haven, CT
 Bachelor of Science, Music and Sound Recording University of New Haven Dean's List, Presidential Scholarship, Tutoring Award 	May 2017 GPA: 3.78/4.0

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