Dylan Rosser www.dylanrosser.us

email cell

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	Pittsburgh, PA December 2020 GPA: 3.52/4.0
Bachelor of Science, Electrical Engineering Bachelor of Science, Music and Sound Recording University of New Haven Dean's List, Presidential Scholarship, Tutoring Award	West Haven, CT 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