Alex Anderson

alexd43anderson@gmail.com • aanderson60.github.io • linkedin.com/in/aanderson60/
Dallas, TX • Résumé current as of July 29, 2023

Academics

Texas A&M University, *Electrical Engineering* ..... M.S. Expected 05/2024
Analog & Mixed-Signal Specialization
Relevant Coursework: Analog VLSI Design, Digital IC Design

Texas A&M University, *Electrical Engineering* ..... B.S. 05/2023
Analog & Mixed-Signal Specialization (GPA 3.88)
Minor in Computer Science

Experience

Analog Design Intern, *Texas Instruments* ..... 06/2023 - 08/2023
High-Speed Signal Conditioning Group: Dallas, TX
- Designed transmit architecture for 13.5 Gbps retimer including 3-tap FFE in 65nm CMOS.
- Verified design over PVT corners and HDMI/DisplayPort compliance requirements.
- Performed system-level simulations with S-parameter channel and connector models.

Undergraduate Research Assistant, *Texas A&M University* ..... 08/2022 - 05/2023
Analog and Mixed Signal Center: S. Palermo
- Verification and measurement of a radiation-hardened optical transceiver in 180nm CMOS.
- Designed 6.25 Gbps optical receiver architecture for second generation test chip.
- Completed undergraduate thesis under University Research Scholars (URS) program.

Applications Engineering Intern, *Texas Instruments* ..... 06/2022 - 08/2022
High-Speed Signal Conditioning Group: Dallas, TX
- Created internally and externally published documentation over TI family of USB 2.0 redrivers.
- Provided support, review, and debugging for customer designs and layouts.
- Obtained lab measurements, compliance reports, and eye diagrams for redrivers, retimers, muxes.

Undergraduate Research Assistant, *Texas A&M University* ..... 02/2022 - 06/2022
Information Science Group: K. Narayanan
- Developed unique experiments and testing schemes using group testing theory.
- Performed designed pooling experiments in a laboratory setting.
- Extensive simulation design in Python using packages including Scipy, Numpy, Matplotlib, Seaborn.

Publications

A. Anderson, "Design of a Radiation-Hardened Optical Transceiver," *Undergraduate Thesis*, Texas A&M University, Department of Electrical Engineering, Apr. 2023.

Y.-L. Luo, C. Hong, **A. Anderson**, D. Dolt, and S. Palermo, "A Radiation-Hardened Optical Transceiver in 180nm CMOS Technology," *2023 IEEE Nuclear & Space Radiation Effects Conference.*

Skills

SerDes Design	Wireline receiver/transmitter, optical receiver, CTLE, FFE
Analog Design	Op-amp, bandgap reference, LDO
Software	Cadence Virtuoso, Maestro, OrCAD, Allegro, LabVIEW, Linux, LaTeX
Programming	MATLAB, Python, C++ , Java, HTML/CSS/Javascript