Alex Anderson

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Academics

Texas A&M University, Electrical Engineering M.S. Expected 05/2024

Analog & Mixed-Signal Specialization

Relevant Coursework: Analog VLSI Design, Digital IC Design

Analog & Mixed-Signal Specialization (GPA 3.88)

Minor in Computer Science

Experience

- 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.

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.

- 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

Mixed-Signal DesignWireline receiver/transmitter, CTLE, FFE, op-amp, bandgap referenceSoftwareCadence Virtuoso, Maestro, OrCAD, Allegro, LabVIEW, Linux, LATEXProgrammingMATLAB, Python, C++, Java, HTML/CSS/Javascript