Zinan Xiong

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Summary

Motivated and hard working electrical engineering graduate, seeking entry-level product engineer position. Versatile and professional with solid experiences in analog circuit analysis and design. Ability to code in C, Java, and Python.

Education

Northeastern University **Boston, MA**
Master of Science in Electrical and Computer Engineering *Sep/2013 – Jan/2016*

Courses: Analog Integrated Circuit Design; Design of Analog CMOS Integrated Circuits; Microelectromechanical System; Micro and Nano Fabrication, Solid State Devices

Beijing University of Chemical Technology **Beijing, China**
Bachelor of Engineering in Electrical Engineering *Sep/2009 – May/2013*

Work Experience

Product Engineer **Walpole, MA**
HTI Medical (High Technology, Inc) *April/2016 – Present*

- Work with product manager, develop and implement new product features.
- Work on multiple projects, provide technical support to customers and resolve technical issues
- Test finished product for quality purposes and recommend changes to product specifications, communicate with manufacturers, ensure efficient production.
- Write technical documents including service manual and operator's manual for the devices.
- Provide training to customers and sales department.

Project Experience

A Low-Power High-PSRR Bandgap Voltage Reference ***Mar/2015 – Aug/2015***

- Designed a two stage differential amplifier in 0.18μm CMOS technology, with sufficient amplification to ensure high PSRR and equality of the two voltage input, enhanced it's stability using Miller compensation.
- Measured the temperature coefficient, PSRR and output noise with Cadence Virtuoso.

MEMS Resonator Fabrication, *Northeastern Sensors & Nano Systems Lab* ***Jan/2015 – May/2015***

- Fabricated a MEMS Resonator using standard processes including oxidation, photolithography, wet etch, dry etch, metal deposition and lift-off.
- Tested the resonator with RF probe and network analyzer.

Fourth-Order OTA-C Filter for Wireless Receivers ***Sep/2014 – Dec/2014***

- Designed a 4th order fully-differential transconductance-capacitor low-pass filter for wireless receiver using biquad circuit.
- Designed the OTA using folded-cascode structure to increase the output swing range.
- Implemented a tunable capacitor array to make the corner frequency tunable from 1MHz to 20MHz.

741 Operational Amplifier Analysis and Design ***Sep/2013 – Dec/2013***

- Did DC analysis on bias stage, input stage, gain stage and output stage by hand, calculated all the main parameters of the circuit including input resistance, output resistance and voltage gain.
- Redesigned the amplifier, simulated with PSpice and gained a profound understanding of operational amplifier.

Skills

Software Languages: Matlab, C, Assembly, Java, Python, HTML5, CSS, JavaScript

Technical Skills: Oscilloscope, Network Analyzer, Schematic Capture, Altium