Chris Yim

4005 Aberdeen Dr, Champaign IL 61822 • 217-390-6840 • chrisyim5@gmail.com • yimster.github.io

EDUCATION

University of Illinois at Urbana-Champaign   GPA: 3.59/4.00

Master of Science, Electrical Engineering   Graduating, December 2019

University of Illinois at Urbana-Champaign   GPA: 3.72/4.00

Bachelor of Science, Electrical Engineering   Completed May 2017

RESEARCH

Hanumolu Research Group   Urbana, IL

Analog/Mixed-Signal IC Graduate Student   September 2017 - Present

- Studying phase-locked loops and delta-sigma modulators
  - Verified functionality and concepts with MATLAB simulations

Shanbhag Research Group   Urbana, IL

Undergraduate Research Assistant   January 2016 – May 2017

- Simulated and analyzed different radial basis function circuits for on-chip support vector machine classification
- Implemented a statistical error compensation scheme for digital ICs in a Verilog to MATLAB interface

Bretl Research Group   Urbana, IL

Undergraduate Research Assistant   July 2014 – December 2015

- Designed a PCB which interfaced an analog front-end with a microprocessor for an EMG controlled prosthetic arm
  - Published a paper for IEEE EMBC 2016

INTERNSHIPS

NVIDIA   Santa Clara, CA

Mixed-Signal IC Verification Intern   May 2018 – August 2018

- Wrote miscellaneous SystemVerilog modules in cadence for verification purposes
  - E.g. Clock random jitter generator, TIE generator, eye-jitter/width/height measurements, ideal SerDes components

Viasat   Tempe, AZ

RF/Microwave Engineering Intern   May 2017 – August 2017

- Completed electrical stress analysis of a frequency converter module in the satellite
- Coordinated with a team to verify specifications for the frequency converter module
- Improved an HFSS model of an SMA to microstrip connection interface

Ecolab   Eagen, MN

RD&E Electrical Engineering Intern   June 2016– August 2016

- Conducted experiments to test the feasibility of current signature analysis for detection of failures in solenoid valves and peristaltic pumps
- Built two different cost-efficient methods for tracking the amount of solid chemistry in Ecolab dispensers

PROJECTS

Low-Dropout Voltage Regulator   Spring 2016

- Designed a voltage regulator in cadence in 180nm process technology
- Outputs 1.2 V – 1.5 V for 1mA – 10mA load current with specs on DC Line/Load regulation

Binary Classifier   Fall 2015

- Developed a circuit that compares the Hamming distances between two pairs of input vectors
  - Layout drawn in cadence with a 250nm process technology

COURSEWORK

(ECE 482) Digital IC Design	(ECE 534) Random Processes	(ECE 459) Communications I
(ECE 483) Analog IC Design	(ECE 310) Digital Signal Processing	(ECE 453) Wireless Communication Systems
(ECE 581) Advanced Analog IC Design*	(ECE 385) Digital Systems Laboratory	(ECE 457) Passive Microwave Devices
(ECE 464) Power Electronics	(ECE 527) System-on-Chip Design	(ECE 447) Active Microwave Devices
(ECE 486) Control Systems	(ECE 441) Semiconductor Devices	(ECE 451) Advanced Microwave Measurements

INVOLVEMENT

Electronics Circuits Laboratory (ECE 343)   University of Illinois

Teaching Assistant   August 2017 – Present

TECHNICAL SKILLS

cadence, MATLAB, C/C++, SystemVerilog, Vivado HLS, EAGLE, ADS, HFSS, Excel