

Bassel Alesh

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EDUCATION	University of Illinois at Urbana-Champaign B.S. in Electrical Engineering, expected graduation of December 2017 GPA: 3.84/4.00		
	Relevant Coursework [F17 = Fall 2017 Coursework] Wireless Communication Systems Analog IC Design Microwave Circuits and Devices Automated Microwave Measurements Digital Systems Lab Fields and Waves (I & II) Electronic Circuits (+ Lab) Computer Systems & Programming Digital Signal Processing Semiconductor Electronics [F17] Active Microwave Circuit Design [F17] Data Structures [F17]		
SKILLS	<i>Languages:</i> Python, C, C++, SystemVerilog, Bash, MATLAB. <i>Software:</i> ADS, Cadence Virtuoso, EAGLE, HFSS, PSPICE. <i>Lab:</i> VNAs, Spectrum Analyzers, Signal Generators, Oscilloscopes, Multimeters.		
EXPERIENCE	Digital Hardware Engineering Intern	May 2017 - August 2017	
	Qualcomm Inc.	San Diego, CA	
	<ul style="list-style-type: none">Working on the PLL of a transceiver chip for the RFIC Digital Design team.Extracted the RLCK parasitics of the digital modules' nets using RaptorX.Created a testbench using Cadence Virtuoso that simulated signal delays along the extracted model and reported the results in the design review.Wrote a Bash script that maintains version control for different tools' runs.Wrote a Python script that facilitates a test performed on specific digital blocks.		
	Undergraduate Research Assistant	September 2016 - Present	
	University of Illinois at Urbana-Champaign	Champaign, IL	
	<ul style="list-style-type: none">Created models for transmission lines and their designated coupling behavior using Python for quicker simulations of large-scale systems.		
	Undergraduate Grader for Fields & Waves I	September 2016 - May 2017	
	University of Illinois at Urbana-Champaign	Champaign, IL	
	<ul style="list-style-type: none">Homework grader and review session organizer for ECE 329. Topics include Maxwell's equations, transmission line theory, and Smith Chart applications.		
	Product Development Intern	May 2016 - August 2016	
	AT&T Inc.	Atlanta, GA	
	<ul style="list-style-type: none">Worked with an LTE modem board purposed for IoT applications and recorded any bugs, along with tests that found them, in preparation AT&T's Shape Expo.Tested the board's UART, GPIO pins and more using AT Commands.Designed a testing shield that for an LTE modem board using EAGLE.		
EXTRA-CURRICULAR ACTIVITIES	ECE Student Advancement Committee, <i>Junior Rep</i>	September 2016 - Present	
	PULSE, <i>Media & Design Director</i>	May 2015 - May 2017	
	Eta Kappa Nu, <i>ECE 329 Review Session Instructor</i>	February 2017 - May 2017	
	Illini Formula Electric, <i>Low-Voltage Team Member</i>	September 2015 - May 2016	
HONORS & AWARDS	ECE 483 (Analog IC Design) Low Dropout Regulator Design - 2 nd Place	2017	
	Ellery B. Paine Outstanding Junior Award	2017	
	ECE Visionary Award	2017	
	James Scholar, Dean's List	2015-2017	