Bassel Alesh

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EDUCATION	**Bachelor of Science in Electrical Engineering** **GPA: 3.86/4.00**

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Bachelor of Science in Electrical Engineering   **GPA: 3.86/4.00**
University of Illinois at Urbana-Champaign   August 2014 - December 2017

Relevant 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)	Digital Signal Processing
Data Structures	Active Microwave Circuit Design

SKILLS

Languages: Python, C, C++, SystemVerilog, Bash, MATLAB.
Software: ADS, Cadence Virtuoso, EAGLE, HFSS, PSPICE.
Lab: VNAs, Spectrum Analyzers, Signal Generators, Oscilloscopes, Multimeters.

EXPERIENCE

RF Systems, Algorithms, and Calibration Intern   January 2018 - August 2018
Apple Inc.   Cupertino, CA

Digital Hardware Engineering Intern   May 2017 - August 2017
Qualcomm Inc.   San Diego, CA
- Worked 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.

Undergraduate Research Assistant   September 2016 - December 2017
University of Illinois at Urbana-Champaign   Champaign, IL
- Working under Professor Jose Schutt-Aine and Professor Andreas Cangellaris on projects in computational electromagnetics using Python.

Undergraduate Grader for Fields & Waves I   September 2016 - May 2017
University of Illinois at Urbana-Champaign   Champaign, IL
- 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
- Worked with an LTE modem board purposed for AT&T's IoT platform.
- 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

Electromagnetics Playground, *Lab Instructor*	August 2017 - December 2017
ECE Student Advancement Committee, *Representative*	August 2016 - December 2017
PULSE, *Media & Design Director*	May 2015 - May 2017
Eta Kappa Nu, *ECE 329 Review Session Instructor*	February 2017 - May 2017
Illini Formula Electric, *Low-Voltage Team Member*	August 2015 - May 2016

HONORS & AWARDS

ECE 483 (Analog IC Design) Low Dropout Regulator Design - 2nd Place	2017
Floyd E. Lundgren Scholarship	2017
Ellery B. Paine Outstanding Junior Award	2017
ECE Visionary Award	2017
James Scholar, Dean's List	2015-2017