Bassel Alesh

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EDUCATION Bachelor of Science in Electrical Engineering

University of Illinois at Urbana-Champaign

August 2014 - December 2017

GPA: 3.86/4.00

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++, System Verilog, Bash, MATLAB.

Software: ADS, Cadence Virtuoso, EAGLE, HFSS, PSPICE.

Lab: VNAs, Spectrum Analyzers, Signal Generators, Oscilloscopes, Multimeters.

RF Systems, Algorithms, and Calibration Intern **EXPERIENCE**

January 2018 - August 2018 Apple Inc. Cupertino, CA

• Developing hardware and software for NFC automation tools and systems.

Digital Hardware Engineering Intern

May 2017 - August 2017 San Diego, CA

Qualcomm Inc.

• Worked on the layout of a transceiver's PLL module 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.

Undergraduate Research Assistant

September 2016 - December 2017

University of Illinois at Urbana-Champaign

Champaign, IL

• Developing a stochastic electromagnetics solver in Python by leveraging Maxwell's equations and plane wave fundamentals.

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 May 2015 - May 2017 PULSE, Media & Design Director 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 1	C Design) Low Dropout Regulator Design - 2 nd Place	2017
Floyd E. Lundgren	Scholarship	2017
Ellery B. Paine Ou	tstanding Junior Award	2017
ECE Visionary Aw	rard	2017
James Scholar, Dea	an's List	2015-2017