Bassel Alesh

501 South Sixth St., Apt. 209, Champaign, IL 61820 · (217) 819-7610 · alesh2@illinois.edu

EDUCATION Bachelor of Science in Electrical Engineering GPA: 3.84/4.00

> University of Illinois at Urbana-Champaign August 2014 - December 2017

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) Digital Signal Processing

Data Structures [F17] Active Microwave Circuit Design [F17]

SKILLS Languages: Python, C, C++, SystemVerilog, Bash, MATLAB.

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

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

EXPERIENCE Wireless OTA/RF Desense & Cal Intern

January 2018 - August 2018 Apple Inc. Cupertino, CA

Digital Hardware Engineering Intern Qualcomm Inc.

May 2017 - August 2017 San Diego, CA

- 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.

Undergraduate Research Assistant

September 2016 - Present

University of Illinois at Urbana-Champaign

Champaign, IL

• 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

• 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 Assistant ECE Student Advancement Committee, Junior Rep

Illini Formula Electric, Low-Voltage Team Member

September 2016 - Present May 2015 - May 2017

August 2017 - Present

2017

PULSE, Media & Design Director Eta Kappa Nu, ECE 329 Review Session Instructor

February 2017 - May 2017 September 2015 - May 2016

2017

ECE 483 (Analog IC Design) Low Dropout Regulator Design - 2^{nd} Place HONORS & AWARDS Floyd E. Lundgren Scholarship

Ellery B. Paine Outstanding Junior Award 2017

ECE Visionary Award 2017 James Scholar, Dean's List 2015-2017