

Bassel Alesh

(217) 819-7610 · basselalesh@gmail.com · bassel.io

WORK EXPERIENCE

Systems Design Engineer

Apple Inc.

September 2018 - Present

Cupertino, CA

- Developed software in C++ for a wireless system validation tool that is deployed across hundreds of stations at iPhone and iPad assembly factories.
- Audited, validated and proposed primary and secondary test equipment suppliers, which resulted in CapEx savings across multiple programs.
- Redesigned a critical driver layer of the platform by implementing a modular, object-oriented approach that allowed us to scale and support future product programs.
- Led contract manufacturer teams at NPI builds in Asia to identify station failures run engineering DOEs.
- Directly responsible for tracking and reporting the status of a new wireless technology project to cross-functional teams and engineering project managers.
- Collected, analyzed and presented thousands of sets of data from program builds and automation experiments.

Systems, Algorithms and Calibration Engineer

Apple Inc.

January 2018 - August 2018

Cupertino, CA

- Designed the software and hardware for a low-cost, in-house wireless validation solution for NFC products.
- Defined and evaluated system features to accommodate for the timeline and the available hardware resources.
- Collaborated with vendors and cross-functional teams to introduce new features without incurring additional costs.
- Developed tests and algorithms in C++ for calibration, verification, and signal processing.

Hardware Engineering Intern

Qualcomm Inc.

May 2017 - August 2017

San Diego, CA

- Characterized the layout of a transceiver subsystem as a member of the RFIC Digital Design team.
- Created a testbench using Cadence Virtuoso and RaptorX that simulated signal delays and parasitics between different blocks on the PLL chip.

Product Development Intern

AT&T Inc.

May 2016 - August 2016

Atlanta, GA

- Developed user-focused IoT solutions for a LTE product to showcase at the launch of AT&T's IoT platform.
- Designed embedded software to collect sensor data and utilize the platform's new developer APIs.

PROJECTS

Receipt Splitting App: Designing an iOS app that splits receipts between friends and tracks personal and group totals.

Front Door Buzzer/Doorbell: Developed a HomeKit-integrated solution to control my apartment's front door buzzer.

SKILLS

Languages: C/C++, Python and MATLAB.

Software: Framer X, ADS, Cadence Virtuoso, EAGLE, HFSS and PSPICE.

EDUCATION

Bachelor of Science in Electrical Engineering

University of Illinois at Urbana-Champaign

GPA: 3.86/4.00

August 2014 - December 2017

Leadership Experience

ECE PULSE Technology Conference - *Media & Design Director*

2015 - 2017

ECE Student Advancement Committee - *Class of 2018 Representative*

2015 - 2017