Bassel Alesh

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WORK EXPERIENCE

Founder   December 2020 - Present
Spliti, LLC   San Francisco, CA

- Developed an iOS app that lets friends split restaurant bills by simply taking a picture of or uploading the receipt.
- Developed the frontend using SwiftUI and Combine, with a handful of UIKit integrations and third-party libaries such as Apollo and Auth0.
- Developed the backend using JavaScript, GraphQL and Prisma.
- Deployed the backend and prisma services using Docker and AWS ECR/ECS.
- Launched a beta with 100+ users and interviewed 30+ of them to gather user experience and usage insights.

iOS Developer - Contractor   January 2021 - June 2021
Ziina Inc. (YC W21)   Remote

- Developed the Know Your Customer (KYC) onboarding flow for Ziina, a P2P payment app for the Middle East.
- Integrated the Jumio iOS SDK for front and back ID scans and face scans using SwiftUI, UIKit, and AVPlayer.

5G mmWave Systems Design Engineer   September 2018 - December 2020
Apple Inc.   Cupertino, CA

- Developed 5G mmWave validation and calibration software in C++ for a wireless system verification tool that is deployed across hundreds of stations at iPhone 12/12 Pro assembly factories.
- Led the integration of test equipment drivers and libraries from external vendors and helped develop APIs in C++ for our instrument framework.
- Redesigned a critical platform layer by implementing a scalable, object-oriented framework that allowed us to easily introduce new test equipment solutions to all 5G mmWave programs.
- Led all of the 5G mmWave factory stations at the iPhone 12 mini New Product Introduction (NPI) builds.
- Developed a calibration algorithm that leverages factory data and numerical analysis to optimize one of our core hardware tests across multiple stations on the assembly line.

Wireless Systems, Algorithms and Calibration Engineer   January 2018 - August 2018
Apple Inc.   Cupertino, CA

- Designed the software and hardware for a low-cost, in-house wireless validation solution for NFC products.
- Developed tests and algorithms in C++ for calibration, verification, and signal processing.
- Defined and evaluated system features to accommodate for the timeline and the available hardware resources.

SKILLS

Languages: Swift (SwiftUI),JavaScript, C/C++, Python and MATLAB.

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

PATENTS

Systems and methods for radio frequency head validation via antenna coupling or signal reflection. (US Patent No. 11,012,164)

EDUCATION

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

Honors & Awards
Ellery B. Paine Outstanding Junior Award   2017
Electrical and Computer Engineering Visionary Award   2017
James Scholar, Dean's List   2015-2017