

# Andrea Lopez

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## WORK EXPERIENCE

**Software Engineer | User Experience Team – HBO Max, Warner Bros. Discovery** Los Angeles, CA 4/22 – Present

- HBO Max | Streaming Entertainment Web and Mobile (iOS/android) Applications: UI and API integration in TypeScript, React Native

**Software Developer – ISBX** Los Angeles, CA 10/19 – 10/21

- Red Bull Co-Pilot | Event Management Mobile Application: Backend integration in Swift, Objective C, RxSwift, GraphQL
- Puffco Peak Pro | Bluetooth Vaporizer Mobile Application: UI in React Native, CMS in React/TypeScript, backend API in NestJS, typeORM
- Rapid Credit | Credit Management Mobile Application: UI redesign and new backend integration in Expo, React Native, TypeScript
- HED Unity | Bluetooth Headphone Application: UI and API integration with well-known music streaming providers in RxSwift

**Software Engineer Intern – Intel Corporation** Santa Clara, CA 7/17 - 9/17

- Created a proof of concept software tool that checked if servers, databases, APIs, inter-process communication framework tools, websites, and windows applications were fully functional after a monthly system patch, and reboot using C# and .NET Framework
- Researched, developed, and implemented methods for optimally displaying product manufacturing flow charts on internal websites to be adopted by 60+ users using Wiki Enterprise, HTML, and CSS
- Researched methods for inserting data tables with dynamic attributes into databases using SQL Server Integration Services and SQL Server Management Services

**Guest Services & Ticketing Assistant Manager – Insomniac Inc.** Los Angeles, CA 6/14 - 12/17

- Supervised teams, sizes ranging from 3-10, in ticket sales and ticket resolution
- Managed Lost & Found team of size 15 through 24-hour operations

**Software Engineer Researcher – Cal Poly Pomona Computer Science Department** Pomona, CA 6/15 – 8/15

- Created a smart pet door prototype that was a cost-effective substitution to existing pet doors, with mobile and intelligent capabilities using Raspberry Pi 2, Arduino, Bluetooth beacon, and linear servo motor

**STEM Mentor/Tutor – Citrus College Mathematics & Physics Department** Glendora, CA 8/14 – 6/15

- Strengthened student commitment to completing coursework by supporting them with STEM tutoring, as well as encouraging their participation in STEM-related activities
- Counseled students on their personal experiences and shared knowledge that aided their personal development

## PROJECTS

**Software Engineer, iOS – BdayPal App** Chino Hills, CA 5/19 – Present

- Designed, developed, tested, marketed, and launched a birthday app on the Apple AppStore using XCode, Swift, Sketch, AppStore Connect, Apple Frameworks, Cocoa Pods
- App Store Listing: [www.bit.ly/BdayPalOnAppStore](http://www.bit.ly/BdayPalOnAppStore) Web Landing Page: [bdaypal.andrealopez.dev](http://bdaypal.andrealopez.dev)

**Student Verilog Engineer – UC Davis Digit Image Recognition Team** Davis, CA 1/17 – 6/17

- Designed a custom FPGA accelerator component that performed digit image recognition on sets of 500 images using DE1-SOC Altera FPGA, Quartus II, MATLAB, C, and Verilog
- Improved the speed of pre-trained neural network by 40% through data compression, storage component selection, preloading data, and neural network optimization while maintaining 90% accuracy

**Student Engineering Researcher – Citrus College Cosmic Research Team** Glendora, CA 6/14 – 6/15

- Improved balloon tracking accuracy by more than 50% with a high-powered GPS unit
- Conducted 4 high altitude balloon test launches that carried scientific payloads which collected temperature, altitude, & sound data to examine the earth's atmosphere conditions using Arduino, Altimeter, Geiger counter, Recorder

## EDUCATION

**University of California, Davis** 12/17

B.S. in Computer Engineering - Emphasis in Digital Systems

GPA: 3.48

## HOBBIES

**Core Team Member – Hack for LA Site:** [www.hackforla.org](http://www.hackforla.org) (Organization Strategy and Events) 5/18 – 4/20

**Board Member – Playa Tech Site:** [www.playatech.io](http://www.playatech.io), (Events) 6/18 – Present