andrealopez.dev#experience linkedin.com/in/andrearaylopez github.com/andrearaylopez | alopez-hbo

# **Andrea Lopez**

Los Angeles, CA / andrealopez.dev#connect

# **WORK EXPERIENCE**

#### Software Engineer, Lead - Warner Brothers Discovery Los Angeles, CA 4/22 - 10/23

- Max | Streaming Entertainment Web Application: UI and API integration in TypeScript, React
- 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 – 11/21

- Red Bull Co-Pilot | Event Management Mobile Application: Backend integration in Swift, Objective C, RxSwift, GraphQL
- Puffco Peak Pro | Bluetooth Vaporizer Mobile Application: UI and backend in React Native, Typescript, 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 Web Landing Page: 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 Design Engineer – UC Davis EEEmerge Team Davis, CA 9/15 – 6/16

• Constructed, wired, and programmed a 2 ft. x 2 ft. infinity mirror, which was activated by hand proximity sensors to provide an interactive exhibit using TI micro-controller, Code Composer Studio, C/C++

#### 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 earths' 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

Board – Playa Tech: www.playatech.io (Events)6/18 – Present, Core Team – Hack for LA Site: www.hackforla.org (Strategy / Events) 5/18 – 4/20