# ERNESTO VALENCIA

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#### **EXPERIENCE**

## Dish Network | Sling TV - Associate Software Engineer

Aug 2022 - Present | UT

Developed and unit tested bug fix to ad-insertion scroll-bar time miscalculation in the Adaptive Player JS

## Amazon Lab126 – Software Engineer Intern → return offer extended

May 2022 - Aug 2022 | CA

- Developed website that provides FireTVs information, and smart search engine based on features, filters and countries
- Engineered program to monitor software releases on FireTVs and their acceptances status as well as alerting failures
- Made critical changes to core framework to fix bugs in Prime parental-control locking features affecting Italy & France
- Wrote new automated tests using Pytest for FireTV in Build Acceptance and Regression End to End test suites
- Fixed existing automated tests across many test suites that were failing or needed adaptation to new software releases

#### **BeatBread** – Software Engineer Intern

Feb 2022 - Apr 2022 | UT

- Redesigned and developed from scratch white-label landing pages using React previously written in Wordpress
- Integrated main website (beatbread.com) with "Plaid" and "ModernTreasury" to automate linking of bank accounts
- Rewrote scripts written in Python to Node.js to automatically send email to first-time customers using SendGrid API

# **BYU Computer Science -**

Research Assistant Apr 2021 - Apr 2022 | UT

- Developed a research tool to study human behavior and the impact of artificial agents using Angular and JavaScript
- Introduced a chat system that allows group creation, public and private messaging, along with anonymous messaging
- Improved communication data by 200x which led to more sophisticated research data results and discoveries

Teaching Assistant Jan 2021 - Apr 2022 | UT

- Taught software engineering principles to 150+ students in the CS 202 & 203 software lab series
- Subjects (not limited to): Git, Java, Debugging, UI design, JUnit testing, JMeter, SonarLint, Selenium, Mockito, Style
- Held lab sessions, graded and provided feedback on assignments, and debugged code live with students

## **EDUCATION**

## SOFTWARE SKILLS

- **Brigham Young University** Junior
  - B.S. Computer Science, SWE 3.86/4.0 GPA
  - Full Tuition Scholarship Honors Program Student
  - BYU Dev Club; Competitive Programming; UX/UI
- Proficient in: Java, C++, JavaScript, HTML, CSS, React, Vue
- Worked in: SQL, MongoDB, Node, AWS, Git, Dart, Flutter, Python, Swift, Angular, C, C#, Jenkins, Docker, Pytest
- Interests: AI Research, Software Dev, Web Dev

#### **PROJECTS**

# Blood Matching Project - Founder/Developer

May 2021 - Sep 2021 | *UT* 

- Created website using AngularJS to allow public to register as donors or receptors of COVID-19 plasma
- Developed algorithm to match donors and receptors taking into account blood type and location proximity

# **Other Projects**

- Founder & developer of recipes website (mamakassrecipes.web.app) with current plans to turn into a social a media
- Programmed an Android app that uses shape recognition to identify number of bacteria in a lab-grown colony
- Engineered Android app to locate, search, and manage for Family events in a Google Map. Java based server with SQL
- Developed a Spelling Corrector using Java that takes into account the number of times a possible word has been used
- Programmed a prime number tester using Python that tests Fermat's theorem and Miller-Rabin test (higher accuracy)
- Used divide and conquer approach to create a Convex Hull Solver with a total complexity of O(nlog(n)) using Python
- Developed a program to provide randomized scripture verses to read at selected/available times of the day

# LEADERSHIP/OTHER

## Faith El Salvador - Founder

May 2020 - Dec 2020 | SLV

Achieved 60+ partnerships food for 3k+ families affected by COVID19 economic shutdown in extreme poverty

#### Other

- 1st Place in Business Case Competition by Silicon Valley Bank redesigned and developed new app within a week
- Played the electric guitar and sang in a band for 2 years