#### **Tyler Heslop**

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#### Education

#### UNIVERSITY OF CALIFORNIA, BERKELEY

Masters in Cyber Security, MiCS

Jan 2023 - Jun 2024

Berkeley, CA

#### SAN FRANCISCO STATE UNIVERSITY

San Francisco, CA

Bachelor of Science, Computer Science, Minor in Mathematics.

Dec 2022

- Dean's List for all semesters attended
- Earned certificate of achievement from the Computer Science department through the Discussion Leader Program
- Pedagogy training
- Research internship in Machine Learning

#### **Experience**

### Revery Labs Software Engineer Intern

Remote, San Francisco, CA

Dec 2022 - March 2023

- Leveraged the Flutter framework and Dart creating a scalable cross-platform app with improved user experience.
- Implemented efficient state management technologies, such as Hive AI and Hydrated Bloc, resulting in a simplified and optimized app architecture.
- Consolidated MySQL tables into NoSQL collections for Firebase to reduce complexity.
- Supplemented backend logic using frontend caching reducing API calls by over 50%.
- Integrated Amplitude tracking with BLoC events and Sentry error monitoring for insight on user experience and application stability.
- Utilized the Flutter Inspector tool for comprehensive testing and debugging, ensuring smooth functionality for end-
- Authored database schema mockups to showcase options for new features using plantUML for readability.
- Refactored features using BLoC state management adhering to best practices for ease of use across engineering.
- Promoted changes to simplify architecture for engineering speed at scale through pull requests and git reviews.
- Analyzed and understood requirements and use cases written in Linear and Figma to design test cases.
- Incorporated pull request reviews into the company workflow to promote communication of changes.
- Lead discussions on predicting user engagement and increasing retention.
- Created builds for QA and collaborated to reduce duplicate tickets and prevent regressions.

# **Computing Alliance of Hispanic Serving Institutions**

San Francisco, CA

Feb 2022 – Dec 2022

# Research Assistant

- Led the training of a self-driving car under the guidance of Professor Wang, utilizing practical engineering skills to create a successful solution.
- Developed a cost-effective solution using a budget RC car and 3D printed chassis to house the Raspberry pi and camera for data collection.
- Successfully trained the model on a G4DN Triton AWS instance, demonstrating technical expertise in machine learning.
- Conducted research alongside Dr. Jingyi Wang, exploring distributed federated machine learning to protect user privacy.
- Employed Google Tensorflow and MNIST datasets to develop a nuanced understanding of the balance between data privacy and efficiency.
- Demonstrated technical proficiency by managing and optimizing AWS G4dn servers using NVIDIA Triton AMI for efficient machine learning.

### San Francisco State University

San Francisco, CA

**Teaching Assistant** 

Aug 2021 – Dec 2022

- Fostered student development of skills in OOP, data structures, parsing, and machine architecture.
- Assisted students at SFSU with debugging C++ and Java programs.
- Sought to inspire students and prepare them for jobs in the industry.

#### **Tyler Heslop**

Grainger Santa Ana, CA

#### **On-Site Service Representative**

Aug 2019 - Aug 2021

• Led successful hardware and software migration for our district from Windows Server 2000 to Ubuntu LTS, improving efficiency and reducing costs.

- Instructed regional team on company VPN, vending software, and third party tools to ensure seamless operations.
- Utilized SAP to ensure timely delivery of reports and transactions to clients, maintaining high quality standards.
- Proactively collaborated with sales managers and key contacts to expand account growth by 150%.
- Strengthened relationships with clients by building trust and providing exceptional service, resulting in increased client retention.
- Authored comprehensive tutorials for teammates, enabling them to quickly resolve technical issues.
- Efficiently managed inventory and performed product dispensing machine repairs to minimize downtime and maintain optimal business operations.

Freelancer Irvine, CA

#### **Full Stack Developer**

Mar 2016 – Aug 2019

• Effectively communicated with client base, translating their needs into actionable contract objectives using Wordpress, Vuejs, and Laravel.

- Successfully migrated multiple ecommerce websites from Wordpress to Shopify, resulting in increased scalability and improved user experience for clients.
- Streamlined client workflows by integrating eBay and Amazon shops with Shopify and automating shipping label creation
- Collaborated closely with clients throughout the project lifecycle to ensure deliverables met their expectations.

Tungsten Royce Santa Ana, CA

#### Freelance Fullstack Developer

Apr 2016 – Jun 2018

• Developed internal tooling with modular front-end using VueJS and Laravel for enhanced rendering speed, simplicity, and extendability.

- Deployed a desktop client using Electron Wrapper for situations requiring offline access.
- Managed application state with Vuex using Typescript interfaces, effectively reducing runtime errors.
- Initiated a complete overhaul of company Adwords account in-line with market research resulting in a 5 to 1 ROI.
- Spearheaded development of brand-awareness through print-ads, videos, text-ads, and demographic research.
- Incorporated product photography into company workflow.
- Produced and edited photos using Lightroom, Capture One, and Photoshop.
- Designed multi-page print advertisements for Luxe Magazine using Adobe Indesign.
- Optimized site performance using Imageoptim compression, ElasticSearch, lazy loading, and Redis caching to score 99% on Google Lighthouse.
- Increased monthly revenue from \$30,000 to \$150,000 while increasing favorable lead types.
- Envisioned and developed company website using Wordpress, Bedrock and Trellis in PHP and JS.
- Authored contact forms in JS with split testing for Google Analytics to track user engagement.
- Provisioned and migrated Debian servers with local DNS to decrease lookup time.
- Migrated company database from MySQL to MariaDB for increased performance.
- Queried company databases to create monthly reports to showcase increased user engagement against site performance.

## Realtor's Commercial Alliance of Orange County

Santa Ana, CA

### Freelance Web Developer

Mar 2016 – Nov 2017

- Increased member retention rate by automating email marketing campaigns using the Constant Contact API.
- Streamlined website development and management using Wordpress and PHP, resulting in improved ease of use.
- Implemented user authentication and JS forms with advanced tracking to gain visitor insight.
- Maximized email delivery rate to 95% by provisioning DNS servers for company email.
- Provided valuable insights into projected event turnout through monthly reports from Google Analytics and Constant Contact.
- Collaborated with associate executive to design visually appealing event flyers, webpages, and emails.
- Diagnosed and resolved technical issues faced by event speakers and board members running Windows.

## Tyler Heslop Leadership & Activities

Great Minds in Stem San Francisco, CA

### Research Assistant, Hackathon Competitor

Feb 2022 – Dec 2022

• Nominated to participate in the GMiS conference in Pasadena to present Professor Wang's research.

• Participated in the GMiS Cybersecurity Hackathon (Novice) placing third.

## **Orange County Registrar of Voters**

Costa Mesa, CA

Jun 2018

**Ballot Collection Processing** 

• Facilitated collection of votes from poll workers.

Irvine, CA

**Java Tutor** 

Apr 2017 – Dec 2017

• Cultivated students' proficiency in core Java concepts, OOP, and data structures.

#### **Skills & Interests**

Devops: AWS, Docker, Sail, Vagrant

**Backend:** Django, Node.js, Express, Laravel

Frontend: Vue.js, Flutter, React, Wordpress, Bedrock

Languages: Dart, Javascript, Java, Python

Databases: Firebase, MySQL, MariaDB, MongoDB, Mongoose

**Software:** Adobe Photoshop, Premiere, After Effects

**Interpersonal:** Excellent communication skills, with the ability to express ideas and defend them based on merit while

remaining open to learning from others