# OSCAR DIAZ VEGA

San Jose, CA | (831) 741-6711 | odiaz95012@gmail.com linkedin.com/in/oscar-diaz-vega|github.com/odiaz95012

## **EDUCATION**

**San Jose State University** - Bachelors of Science, Computer Science, GPA 3.9 **Hartnell College** - Associates Degree, Computer Science, GPA 4.0

May 2024 December 2021

### **TECHNICAL SKILLS**

**Libraries/Frameworks** | React, React Native, Next.js, Flask, Bootstrap, Tailwind, Pandas **Languages** | Python, Java, C, C++, SQL, Cypher Query Language, Javascript, TypeScript **Testing/Deployment** | Docker, JUnit, Postman, PyUnit **Databases** | MySQL, Neo4j, MongoDB, Cassandra, Redis

#### **EXPERIENCE & PROJECTS**

### **Software Engineer Intern | CTI-CodeDay**

June 2022 - Aug 2022

Open-source Development

Javascript | Java

- Contributed to the CodeCheck open-source project, an anonymous auto grader for instructors.
- Mentored and supervised by Cay Horstmann, Professor at PFH Private Hochschule Göttingen.
- Created a local file system in Java, using OOP component based architecture that enabled students to save, retrieve, and edit their work locally on command.

### **Full-Stack Software Engineer | Hoken Online Bank**

Aug 2023 - Nov 2023

Front-End Development Lead, Back-End Architechture

React | TypeScript | Bootstrap | Flask | MySQL | Docker

- Led the development and design of the application's user interface, using React, Bootstrap, and TypeScript.
- Achieved 65% test coverage of the application using PyUnit.
- Led weekly stand-up meetings with the team to discuss the project's progress.
- Containerized the entire application using Docker for efficient deployment and scalability.
- Mentored peer engineers on front-end development and best practices.

#### Full-Stack Software Engineer | SongSnap

Sep 2023 - Dec 2023

Front End Developer, Lead Back-End Engineer

React | TypeScript | Bootstrap | Express.js | MySQL | Docker

- Crafted a dynamic full-stack social media platform, centered around music sharing, with React, Express, and MySQL.
- Normalized the database to decrease query retrieval times by 8%.
- Integrated Deezer's APIs for music search and playback functionality.
- Leveraged AWS S3 Buckets for image storage and retrieval within the application.
- Containerized the entire application using Docker, enabling swift development, deployment, and scalability.

# Full-Stack Software Engineer | PopcornPicks

Feb 2024 - May 2024

Front-End and Back-End Lead, Database Developer Next.js | Tailwind | TypeScript | Python | Java | Spring Boot | CQL | Neo4j

- Created a personalized movie recommendation system using user preference collection techniques with Next.js, Tailwind, Spring Boot, and Neo4j.
- Designed and implemented the application's user interface that was awarded the classes' best user interface across all projects.
- Leveraged Next.js server side rendering for movie props to increase the rendering speed of retrieved individual movie detail pages.
- Optimized data retrieval efficiency by leveraging Neo4j's graph based model to represent user and movie data and relationships.
- Webscraped data from IMDB's top 250 movies using Python Beautiful Soup and stored it into the Neo4j database.
- Designed the recommendation algorithm that utilizes a user's preferences along with their followed users preferences to generate a personalized movie playlist.