# CARLOS ARIAS-MIRANDA

CELL (908) 422-6430 E-MAIL carlosar1219@hotmail.com PORTFOLIO GITHUB LINKEDIN

## **EXPERIENCE**

Software Engineer November 2021 - Present

Google

- Designed and implemented API framework to guarantee platform support scalability for Google Meet first-party and third-party devices.
- Coordinated multi-team efforts to improve interprocess communication across platforms.

### **Software Development Engineer**

July 2020 - November 2021

Amazon, Inc.

- Designed and implemented a system which would run weekly to manage user permissions for ~60 million users leveraging AWS tools such as S3, Lambda, DynamoDB, SQS, SNS.
- Played an instrumental role in the development of microservice-based customer-facing mobile application in React native with ~250,000 monthly active users (MAU).

Software Engineer May 2019 - July 2020

LoanStreet, Inc.

- Reduced average response time for users with >1,000 entries from 7850ms to 350ms.
- Developed stateful application to produce historical reports of user loans, payments, and participations in 35s; with the legacy system taking 15min to produce similar report.
- Designed and engineered audit trail feature for production application in order to create a detailed report of data changes.

Full-Stack Developer 2017 - 2019

Express Transport by Air, LLC.

- Pioneered and implemented a warehouse product tracking system to increase personnel productivity by 50%.
- Engineered innovative internal tools using PHP, JavaScript, jQuery and SQL to maximize efficiency and reduce clerical errors by 15%.

## **PROJECTS**

Fakebook (Rails, React, Redux, GraphQL, PostgreSQL, AWS S3, Heroku) | Sole Developer

live | github

A single-page web application inspired by Facebook where users can share media with family and friends from all over the world

- Introduced improvements in time complexity and server loading speed by designing custom SQL queries to extract required data in a single query through the use of Active Record associations.
- Engineered a custom process for multiple media file uploading which mimicked Facebook's media uploading process precisely.
- Reduced the number of required database tables by 16% and refactored backend code by utilizing polymorphic tables.

#### Keypress (JavaScript, Webpack, HTML5, CSS3) | Sole Developer

live | github

Fully interactive javascript application where users can complete typing lessons to improve their accuracy and speed.

- Eradicated graphic rendering lag and enhanced user experience (UX) by building a custom image caching algorithm which caches lesson images on a per-need basis.
- Implemented a seamless multi-page experience through custom, highly maintainable, JavaScript rendering functions and OOP.

# **EDUCATION**

**Thomas Edison State University** - B.S. Electronics Systems Engineering **Union County College** - A.S. General Engineering

2017 - 2019