Jose Suarez-Rodriguez

Software Engineer

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"Design and programming are human activities; forget that and all is lost."

Experience

TikTok
San Jose, California

Software Engineer — *Jul. 2020 - Present*

- Led Auto-Translation project for Explore Feed text content. Designed and implemented the feature with Cross Language Accessibility integration, achieving +1.7% Play Time, +1.1% Stay Time, +2.8% Enter Profile rate. Increased the translated post rate from 0% to 93%
- Delivered Explore Feed Lightweight data payloads feature reducing p99 latency from 530ms to 360ms during peak traffic periods. Responsible for technical design and implementation. Led to an increase in the new content view percentage from 74% to 82%, +0.47% enter Explore tab rate, +0.74% Stay Time, +1.69% card show and +0.73% card click
- Built an end-to-end Photo Search Signals Pipeline (Airflow → Kafka → Redis) improving For You page recommendation (informative content video view +14%) and driving High Quality post creation (post creation items +0.65, submission days +2.5%)
- Built a generalized case review system supporting random sampling across entire TikTok Photo-Text ecosystem and LLM based analysis. Implemented a front-end component enabling PMs/Eng/Ops teams to create and view backend data via a no-code interface
- Developed an Anomaly Detection pipeline and LLM-powered trend identification
- Designed improvements to the Photo Mode Cloud Platform with self-service dataset management, permission system, and ad-hoc clustering for photo content
- Led technical design for Non-Personalized Feed (EU/CA U18 regulatory compliance) and Alternate Text for Photos (WCAG accessibility). Implemented Photo Mode Keyword Filtering improving external shares +2%/VV, +1.3%/U
- Designed and implemented Explore Feed Intermixed Content backend enabling mixed photo/video delivery. Delivered +70% Play Time, +117% Play/U, +30% Stay Time, +0.94% enter Explore Feed rate through cross-team collaboration

Roofstock
Oakland, California

Software Engineer — *Feb. 2020 - Apr. 2020*

- Collaborated with the underwriting team to enhance functionality of the internal software used by real estate analysts, developed using the .NET framework in C#
- Implemented functionality that streamlined setting of real estate market floor rates by adding Razor pages to an internal application which allows any user to create and modify these values. This eliminated a company-wide bottleneck by removing the need for an engineer to perform this task
- Designed and implemented database table schemas required for new feature development
- Implemented several API microservices in collaboration with the Data Science team that were used to classify real estate occupancy

Datacoral
San Francisco, California

Software Engineer — *Sep. 2018 - Dec. 2019*

- Implemented and maintained both APIs and services to support a NodeJS based data processing platform
- Developed custom file parsers to support changing requirements for data ingestion
- Performed on-call engineering duties as well as debugged existing issues in production environments
- Developed platform functionality in AWS Lambda
- Implemented a new data source connector to ingest Outreach information into customer data warehouse

Proxoshop
San Diego, California

Software Engineer Intern — *Jun. 2017 - Oct. 2017*

- Developed native iOS application
- Implemented user authentication using REST APIs
- Added custom grocery shopping list functionality using mongoDB

Education

Stanford University
Stanford, California

B.S. in Computer Science — *Sep. 2014 - Jun. 2018*

- Information Track – Focused on synthesizing topics from across Computer Science that pertain to creating, processing and understanding digital information in the modern world of computing

Technical Skills

Languages Go, NodeJS, Python, Java, C#

Other MySQL, Redis, Kafka, Microservices, RPC, Git, API Development

Projects

Fantasy Football Lineup Generator

Stanford, California

Developer

Nov. 2016

- Built a program to generate the optimum lineup on fantasy football daily sites
- Implemented a Machine Learning algorithm to analyze the values of individual players
- Modeled a Constraint Satisfaction Problem to generate candidate teams

NBA React Native

Stanford, California

Developer

Mar. 2018

- An NBA score checking application, made with React Native
- Allows users to check scores, view game statistics and check conference standings
- Redux for state management

Augmented Reality Pacman

Stanford, California

Developer

Jun. 2018

- An augmented reality version of the Pacman game based on the user's real world location, made with React Native
- Backend uses OpenStreetMap APIs to construct graph used to represent the game state and is capable of tracking multiple players in the game board
- Frontend uses MapView component to display the user's location and updating game map in real time
- Frontend also implements a collision detection system and renders 3D models as the user moves throughout the AR world