



Muhammad Javed

Senior Software Developer @ Per Diem (YCW21) · Toronto, Canada

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summary

Senior Software Developer with a Master's in Applied Computer Science and 5+ years building production web and mobile apps for the restaurant industry. Core engineer at a YC-backed startup, owning payment systems (Stripe, Square), delivery integrations (Uber Direct, DoorDash Drive), and scheduling infrastructure for 800+ merchants (2,000+ locations) and 1M+ users on 800+ white-label apps across iOS and Android. Published open-source npm libraries (@perdieminc/order-pacing, @perdieminc/perdiem-models) in active production use.

experience

Per Diem

Jun 2021 - Present

Senior Software Developer · New York, USA (Remote)

Led development of white-label multi-tenant restaurant apps (React Native) including custom theming and automated Fastlane publishing pipelines. Managed complex app state using Redux and Redux Sagas.

- Built automated Fastlane publishing pipeline that generated and deployed 800+ white-label apps to the App Store and Google Play, eliminating manual release intervention.
- Architected payment infrastructure integrating Stripe and Square POS, handling transaction processing, recurring subscription billing, processing refunds and automated fee calculations via webhooks for 2,000+ locations.
- Built delivery integrations with Uber Direct and DoorDash Drive APIs, enabling last-mile delivery with real-time order tracking and status webhooks at scale.
- Built pickup and delivery scheduling including time-slot generation, restricted dates, and per-merchant availability rules - handling timezone edge cases and real-time slot updates.
- Designed and published open-source npm packages including an ORM with built-in Redis-based caching, order-pacing, and order-scheduling libraries optimized for high-throughput order processing across 800+ merchants and 1M+ users.
- Engineered a shared caching layer on Redis with 95% hit rate on frequently accessed objects, reducing database read load under peak traffic.
- Built an async image processing pipeline using AWS SQS and BullMQ to sync inventory and transform images at scale.
- Maintained production RESTful APIs (Node.js, TypeScript) serving core API, scheduling system, and referrals to web and mobile clients.
- Implemented i18n across backend emails and push notifications for white-label multi-tenant apps.

projects

Order Pacing github.com/PerDiemInc/order-pacing

WORK

Published npm package for pickup and delivery order throttling and pacing at scale.

Node.js

Per Diem Models

WORK

Shared database model and caching layer on Knex.js and Redis (published npm package).

Node.js · Redis · Knex.js

Recommendation Engine github.com/theahmadzai/recommendation-engine

HOBBY

AWS-backed product recommendation engine for white-label restaurant apps.

Python · AWS

Image Panda github.com/theahmadzai/image-panda

HOBBY

Cross-platform desktop app for batch image compression - offline + TinyPNG.

Electron · React

Immortal OS github.com/theahmadzai/immortal-os

HOBBY

Hobby boot loader written from scratch - exploring low-level systems.

Assembly · C

Quran github.com/theahmadzai/quran

HOBBY

Quran.com API helper module for PHP developers.

PHP

Blood Cell Image Classifier github.com/theahmadzai/mld-advanced-project

SCHOOL

Trained ML models on a blood-cell dataset using Canada's HPC supercomputer for a graduate course.

Python · PyTorch · HPC

ANSS Foundation github.com/theahmadzai/anss

VOLUNTEER

Community support platform with Stripe donation integration.

Gatsby · Contentful · Stripe

education

St. Francis Xavier University

Sep 2023 - Apr 2025

Master of Applied Computer Science (Computer Science)

Arid Agriculture University

Feb 2017 - Aug 2021

Bachelor of Science (Computer Science)

skills

Languages: TypeScript, JavaScript, Python, PHP, SQL

Frontend: React, React Native, Next.js, Redux, Gatsby, Electron

Backend: Node.js, Express, Fastify, Laravel, GraphQL, REST APIs

Databases & Caching: PostgreSQL, MongoDB, Redis, Knex.js

Cloud & Infrastructure: AWS (CDK, Lambda), GCP, Cloudflare, Vercel, Docker

Queueing & Scheduling: AWS SQS, BullMQ, Bree

DevOps & CI/CD: GitHub Actions, Jenkins, Fastlane

Payments & Integrations: Stripe, Square POS, Clover POS, Uber Direct, DoorDash Drive

Testing & Observability: Jest, Mocha, Chai, Sinon, Puppeteer, Detox, Sentry, Bugsnag, Mixpanel