

# RAFAEL SILVA-VERGARA

## Senior Software Developer

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in rafa-el-silva-vergara

## SKILLS

JavaScript

TypeScript

Python

PHP

HTML

CSS

PostgreSQL

MongoDB

MySQL

GraphQL

Apollo

REST

ExpressJS

Django

NodeJs

NextJS

React

Laravel

Redis

Kafka

Kubernetes

Docker

Terraform

Azure

AWS

Jest

Cypress

Git

New Relic

Graphana

CI/CD

Linux

## EXPERIENCE

### Senior Software Developer

#### North Nerds

📅 Feb 2020 – Present

📍 London Ontario, Canada

- Led a team of three developers to design and develop a minimum viable product for a **peer-to-peer marketplace** using **PHP**, **Laravel**, and **MySQL**, securing over \$75K in angel investment funding.
- Designed and built a fault-tolerant, event-driven **affiliate system**, processing 2K+ real-time events daily, leveraging dynamic incentive tracking to increase user sign-ups and retention by 20%.
- Implemented a **React Design System** with a comprehensive component library, significantly reducing duplicated boilerplate code by over 200% and ensured our applications remained DRY
- Architected a fault tolerant, horizontally scalable SMS & email notification system, processing over 10K+ daily messages with retry mechanisms that minimized delivery failures and drove 3x increase in user retention and engagement.
- Engineered a scalable **media upload service**, migrating from local storage to **Amazon S3** to enhance reliability, reduce server load, and enable seamless handling of large files across multiple environments.
- Optimized data pipelines utilizing **MongoDB's aggregation pipelines**, reducing query execution time by 80% and improving data retrieval performance for high-throughput microservices in a distributed system.

### Software Developer - Platform

#### Intelix Technologies

📅 Apr 2022 – Oct 2024

📍 Vancouver British Columbia, Canada

- Pioneered the transformation of a monolithic front-end into a **micro-front-end platform** using **Piral**, enabling modular development, reducing feature delivery time by 20%, and improved developer workflows.
- Developed scalable **platform-level dashboards** for task, role, and group management using **React** and **TypeScript**, optimizing performance to efficiently handle 100K+ records with infinite scrolling and server-side pagination.
- Directed the adoption of **Apollo Federation**, reducing redundant **GraphQL** API calls by 50% and cutting server costs in half.
- Led a cross-functional team in building an **LLM-driven compliance document processor**, automating regulatory analysis and summarization with generative AI. This innovation won the 2023 Intelix Hackathon.

### Full-Stack Software Developer

#### CashFlow Tribe

📅 Mar 2021 – Jan 2022

📍 Windsor Ontario, Canada

- Executed a **gamification** strategy, leveraging achievement badges, leaderboards, and progress tracking. This initiative tripled daily active users and doubled course completion rates, significantly enhancing user engagement and retention.
- Orchestrated the development of an **e-Commerce store**, resulting in a 5% increase in company profits through merchandise sales.
- Enhanced company infrastructure by designing and deploying an **internal intranet system** with **Python & Django**, significantly improving company-wide communication and collaboration.

## EDUCATION & CERTIFICATIONS

#### South Collegiate Institute

📅 July 2017 – May 2020

#### Regina Mundi Catholic College

📅 Sept 2012 – June 2014

#### Back-End Professional Certification

##### Meta

📅 Nov 2024

#### Azure Fundamentals

##### Microsoft

📅 Nov 2024