# Rafael Silva Vergara

### Software Engineer

Vancouver, BC V5R 6H3 | 226-927-6583

rafaelsilva@northnerds.com | <https://www.linkedin.com/in/rafael-silva-vergara/>

## Core Skills

**Programming Languages**

Typescript, JavaScript, Python, PHP, C#

**Frameworks & Libraries**

Apollo, Piral, GraphQL, Django, REST, Laravel, React, NodeJS, Express

**DevOps & Cloud**  
Docker, Kubernetes, Azure, Octopus, GIT

**Databases**  
MongoDB, MySQL

**Testing Frameworks & Tools**  
Jest, Cypress, Postman, Insomnia

**UI/UX Design**  
Adobe XD, Figma

## Work Experience

**Software Developer** Apr 2022 – Present

Platform Engineering | Full-Time

*Intelex Technologies Inc | Vancouver British Columbia*

* Implemented various platform-level user dashboards, including task, role, and group management features, using **React and TypeScript**. Optimized for performance, handling 100,000+ records by leveraging infinite scrolling and server-side pagination strategies.
* Developed an intuitive and dynamic front-end for an **AI-driven** application (ehsAI), enabling real-time editing, feedback, and processing for seamless integration with a proprietary Large Language Model (LLM).
* Contributed to the transition of standalone SaaS applications into a unified platform, utilizing a micro-service architecture and the Piral framework for **micro front-end development** to meet organizational goals.
* Played a key role in introducing **Apollo Federation**, minimizing client to server API calls by 50%+, reducing redundant data fetching, optimizing server resource usage, and simplifying data access across services.
* Conducted numerous code reviews and mentoring sessions. Providing constructive feedback and pushing for maintainable code to satisfy our coding standards.
* Utilized **MongoDB's** aggregation pipelines to create impressive data processing workflows, enabling complex queries, reducing application-side processing, and improving overall query performance.

**Tech Stack**: React, Typescript, Apollo, Piral, MongoDB, GraphQL, NodeJS, Express JS, Docker, Kubernetes, Azure, New Relic, Linux, Octopus, Jest, Cypress, Apache Kafka

**Founder & Software Engineer** Feb 2020 – Present

Freelancing | Part-Time

*North Nerds Inc | London Ontario*

* Developed engaging, responsive user interfaces utilizing **React**/**TypeScript** transforming design concepts into visually impressive online experiences for all users.
* Designed and implemented diverse APIs using **Django**, **NodeJS**, or **Laravel**, leveraging both **REST** and **GraphQL** frameworks to enable performant data exchange. Improved client-server communication and optimized server-database interactions with **MongoDB** and **SQL** databases.
* Employed diverse deployment strategies, such as **VPS**, **Cloud services**, and **PaaS**, tailored to the specific needs and objectives of small businesses and startups, ensuring efficient and scalable web application deployments.
* Provided expert consulting services, delivering value to growing businesses and startups, devising robust and scalable architectural solutions and design patterns tailored to their unique needs with a growth mindset.

**Tech Stacks**: React, TypeScript, Django, Python, GraphQL, MongoDB, REST, MySQL, PHP, Laravel, WordPress, Docker, Kubernetes

**Website & IT Lead** Mar 2021 - Jan 2022

Real-Estate Education Platform | Full-Time

*Cashflow Tribe | Windsor Ontario*

* Created responsive web pages using **JavaScript**, **PHP**, **CSS**, **HTML**, transforming designs into visually striking online representations.
* Implemented a company intranet system to enhance internal company-wide communication and collaboration, resulting in a stronger organizational level infrastructure.
* Expanded sales opportunities by developing an E-Commerce store to sell company merchandise, increasing planned revenue by a target of over 15%.
* Introduced **Agile** development methodologies of continuous improvement, leading to a significant reduction in project development times.
* Integrated and customized multiple WordPress plugins and themes to meet the needs of tailored designs and product requirements.

**Tech Stack**: JavaScript, PHP, CSS, HTML, WordPress, MySQL

## Awards & Certifications

**Intelex Hackathon 2023 Champion** Mar 2023

*Intelex Technologies Inc*

Winners of the annual Intelex Hackathon, a competition to promote innovation, collaboration and test the skills of the engineering teams.

**Programming In Python** Sep 2023

*Meta*

Developed advanced Python programming skills, covering key concepts such as object-oriented programming, data structures, and algorithms.

**Effective Technical Communication** Feb 2023

*LinkedIn*

Learned strategies for clear and concise technical writing and speaking, focusing on effective communication of complex ideas to both technical and non-technical audiences.

**Leadership In Tech** Feb 2022

*LinkedIn*

Gained insights into leadership principles specific to technology teams, emphasizing collaboration, decision-making, and fostering innovation in technical environments.

## Hobbies

**Technical Writer** Aug 2024

*Medium*

Creating technical resources focused on programming and computer science, including tutorials, guides, and documentation. Tailoring content to address various skill levels, from beginner to advanced, while ensuring clarity and accuracy in presenting complex topics.

## Education

**London South Collegiate Institute** Jan 2014 - Dec 2016

**Regina Mundi Catholic College** Jan 2012 - Dec 2014