# Francisco Cruzado

Portland, OR | cruzadof@oregonstate.edu | franciscoc.com

#### PROFESSIONAL EXPERIENCE

## Software Engineer | BlueScope | June 2023 - May 2024 | Kansas City, MO

- Authored and deployed a C++ microservice on Azure for production data input, supporting multiple input methods and ensuring compatibility with legacy systems across 7 US plants.
- Optimized critical PL/SQL queries and conceived a caching strategy using Redis, reducing Oracle APEX Forms' load times by 25% in average.
- Designed and implemented new database tables for frequently accessed intermediate data, reducing query loading for complex financial calculations by 10 seconds.
- Collaborated with database administrators to ensure robust network connections between microservices and the company's Oracle databases.
- Engineered Python solution to simplify PL/SQL queries, resulting in the creation of data modules accessible through Power BI; reduced data model refresh time by 5 minutes.

## Software Engineer | United Nations Volunteers | Jan 2023 - June 2023 | Remote

- Updated over 40 database triggers on SQL Server, reducing refresh times across Power BI workspaces by 2 minutes.
- Developed a RESTful API endpoint using Java for secure document retrieval, improving user experience by mirroring server folder structure in the UI.
- Utilized the Gin framework to reduce response time accessing a SQL Server database by 5 seconds.
- Authored React and VueJS UI components to be used by 10 UN specialized agencies in WordPress.

#### Software Engineer Intern | United Nations | June 2022 - December 2022 | Remote

- Optimized server requests for a trade simulation application by writing over 25 PL/SQL stored procedures.
- Created 3 ElasticSearch analyzers to simplify the analysis of over 550 XML government documents.
- Streamlined a trade simulation application's performance by deploying 5 custom ElasticSearch ingest pipelines, reducing load time in 0.5 seconds.

## Database Developer | Green Vex SAC | January 2022 - June 2022 | Remote

- Centralized data management by translating over 400 Excel files into a MySQL sales and inventory database.
- Integrated a two-factor authentication (2FA) system to the phpMyAdmin interface, using Laravel.
- Configured a Redis instance to manage records for over 500 unique daily customer logins.

## **PROJECTS**

## TransMonEE Website | UNICEF | February 2024

 Revamped a <u>website</u> used for tracking progress on Child Rights' enforcement across Europe and Central Asia using JavaScript and Drupal

#### H1B Sponsor Checker | Chrome Web Store | December 2022 | 1000+ users

- Set up 3 persistent ETL pipelines for managing users' donations, telemetry data, and text classification training data, using AWS RDS, AWS SQS and DynamoDB.
- Published a <u>browser extension</u> that tags job postings based on sponsorship availability using TypeScript and Spring Boot, reaching users from over 25 countries.

#### **EDUCATION**

#### MEng Computer Science | Oregon State University | Sep 2024 - June 2026 | Corvallis, OR

Courses: Computer Networks, Computer Architecture, Graphics Shaders, Parallel Programming | GPA: 4.0

BA Economics | St. Mary's University | August 2019 - May 2023 | San Antonio, TX GPA: 3.82

## TECHNICAL SKILLS AND LANGUAGES

**Technologies:** Azure (Virtual Machines), Blender, CSS, EC2, GCC, Git, GitLab, GNU Debugger, GCP, HTML, Linux, MySQL, Oracle APEX, Oracle EBS, Postman, Power BI, PVCS, PL/SQL, RESTful APIs, Tmux, Vim

Programming Languages: C++, Python, Java, JavaScript, TypeScript, Python, Golang, x86 assembly

Languages: Spanish (Native), English (Proficient), French (Proficient)