

Harold Camacho

Software Engineer

✉ harold.camacho.diaz@gmail.com 📍 Toronto, Ontario 🔗 haroldcamacho.dev 🌐 harold-camacho 🗣 camachoh1

📁 Professional Experience

2024/10 – present Remote, Canada & U.S.	Creator, Software Engineer <i>Splinter splinter-app.github.io</i> Developed Splinter, an open-source pipeline that simplifies ingesting and processing unstructured data for AI/ML workflows. <ul style="list-style-type: none">Architected a scalable, ephemeral AWS-based infrastructure that activates compute resources solely during data ingestion, enabling the system to scale to zero when not in use, eliminating idle-cost overhead, and improving cost efficiency.Implemented an event-driven system that ensures real-time updates to vector databases, where changes at the data source automatically trigger the addition, update, or removal of documents.Optimized AWS Fargate performance by creating lightweight Docker images and refining resource allocations, boosting efficiency by 70% and reducing ingestion time for a 2.2 MB PDF from 3.5 minutes to 1 minute.Integrated non-AWS document stores like Dropbox into the pipeline using DynamoDB, Lambda, and API Gateway, ensuring secure connectivity and a seamless user experience for document ingestion and management.Built an Observability Dashboard using React, and AWS WebSocket API Gateway for real-time ingestion insights, powered by AWS Lambda and DynamoDB.Developed a RAG Sandbox chatbot that validates ingested data by dynamically interacting with the database.Authored comprehensive technical case study, readable at splinter-app.github.io/case-study
2024/05 – 2024/07 Remote, Canada & Mexico	Freelance, Software Engineer <i>Cibera</i> Developed Recobra Crédito, a financial analysis tool to streamline credit, financial, and sales study processes for a Cibera client, improving analyst efficiency and decision-making speed. <ul style="list-style-type: none">Implemented a robust backend using C#, ASP.NET MVC, Entity Framework, and PostgreSQL, reducing data access complexity and improving maintainability.Built comprehensive data models, DTOs, and controllers to support complex credit calculations and financial reporting, ensuring accurate insights for business stakeholders.Designed and integrated PostgreSQL databases with Entity Framework, enabling efficient, stateful data tracking.Developed React and Ant Design-based front-end components to create intuitive dashboards, improving user satisfaction and reducing training time.
2022 – present Toronto, Canada	Software Engineer <i>Open Source Projects</i> <ul style="list-style-type: none">RequestBin Clone: A web service that allows users to create custom endpoints to collect and inspect HTTP requests -- enabling the testing and debugging of APIs, webhooks, and other HTTP-based services. (Digital Ocean, Nginx, PostgreSQL, MongoDB, Node.js, Express, React)Simple Active Record ORM: Designed a Ruby-based ORM following Active Record principles for streamlined database interactions. (Ruby, PostgreSQL, PG)

🎓 Education

2021 – 2024	Software Engineering <i>Launch School</i> Multi-year, mastery based software engineering curriculum. Read more at launchschool.com/employers
2014 – 2019	Bachelor of Music BMus <i>Humber College, Toronto, ON</i>

🧠 Skills

Languages & Frameworks

Ruby, JavaScript, TypeScript, Python, Node.js, Express, Handlebars, Sinatra, React, ASP.NET, C#.

Cloud

AWS CDK, EC2, ECS, Lambda, S3, Batch, DynamoDB, API Gateway.

Other Technologies

PostgreSQL, MongoDB, Pinecone, Docker, Nginx, Digital Ocean, Git/Github, RESTful API's, Linux, Bash, Trello.