Victor Santiago

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Employment

Tech Lead Hubspot July 2024 – Present

- Leading a team of 4 which is responsible for making the systems that renders all marketing e-mails sent by HubSpot. Our team owns multiple services, each one handling **over 10,000 requests per second** and are a critical part of the e-mail sending pipeline;
- Built the **POC** for a feature that personalises the e-mail for each individual contact sent using **AI**. The POC went on to become a fully fledged feature, showcased on Inbound (HubSpot's Marketing and Sales conference) and is currently on the process to be patented in the US.
- Worked on a number of other **AI features** used in the e-mail editor, such as generating subject line and preview text for e-mails to **increase the open rate** for e-mails;

Key Technologies: Java, SQL databases, Kafka-based systems, and a number of internal tools for LLMs, RAG and LLM evaluation.

Senior Software Engineer

Holistic AI

April 2023 - Present

- I work closely with the Data Scientists to develop and deploy a range of **AI systems**. Setting up inference servers using Triton, deploying our models, and building the production APIs around it;
- Built a service to automate gathering information on the client's systems using a **LLM (Large Language Model)** which extracts necessary information to generate a risk assessment on the system;
- Optimized the total running time of our data extraction service from upwards of **15 minutes** down to less than **2 minutes**, by tuning and choosing the best hardware that fit our budget and re-architecting the service.

Key Technologies: Python, Java, Typescript, React, Datadog for monitoring and services deployed on GCP and Azure on Kubernetes, and AWS using the Serverless stack.

Software Engineer, Enterprise

Meta

January 2022 - March 2023

- Part of the team that builds the internal supply chain software for Meta;
- Led the implementation of Meta's internal approval workflow used to request accessories and devices in the internal store. We built a customizable solution that allowed the business users to configure approval rules on a UI, **greatly reducing** engineering efforts and maintenance, and also saving the company a projected \$1 million in their first year;
- Helped onboarding several new engineers in the team, getting them up to speed and serving as point of contact for learning our systems;

Key Technologies: Hack, Python, React, Typescript, GraphQL.

Software Engineer

NetEnt

January 2020 - December 2021

- Built a number of microservices for slot games, deployed on our on-prem data centers in multiple sites and on GCP, and scaled them to process **hundreds of thousands** of game rounds **every minute**;
- Migrated our legacy monolith from an on-prem setup to GCP, and then to a microservice architecture;
- Improved **latency issues** on time-sensitive reporting, which was a major risk for losing the gambling license, from the order of multiple seconds to a few **milliseconds** in a legacy system;

Key Technologies: Java, Scala, Kafka, PostgreSQL and a range of GCP products including GKE, Stackdriver, Cloud SQL.

Software Development Engineer

Amazon

January 2017 – December 2019

- Developed high scale services for the **AFT** (**Amazon Fulfilment Technologies**) and features for the Marketplace on the Amazon retail website;
- Built **event-driven services** using the AWS Serverless stack. Including, matching algorithms for inventory and inbound invoices, large-scale data collection and Data Warehousing storage and others;
- On the Marketplace team, we've built features used by **dozens of millions of users** across the globe, following Amazon's **low-latency** requirements for the website, including payment in installments, invoice generation for foreign sellers, and a range of other functionalities on the search, and checkout pages of the website;
- Improved our oncall by automating all steps of our internal infrastructure, including Cloudformation for resource generation and Ruby scripts to generate Wiki pages, monitoring and alarms;
- Started out as an intern and moved to a full time position on May 2018;

Key Technologies: Java, Python, Javascript and a wide range of AWS products including Lambda, SQS, SNS, DynamoDB, Redshift and others.

Education

B. Sc. Computer Science

Universidade Mackenzie

July 2013 – July 2018

- One of my research projects exposed **one of the largest security breaches** in Brazil's public transportation system which allowed users to ride the subway and buses for free using a smartphone, and was reported in several major newspapers. You can read more on the news coverage here;
- Bachelor Thesis was titled **Probability Models applied to Football**, and focused on implementing and analyzing multiple models on predicting football matches outcomes;

Exchange Program

The University of Sydney

July 2014 – July 2015

• Awarded the **Science Without Borders scholarship**, on a nationwide program, for a one-year exchange program at the university and research during the summer;