MIGUEL VILÁ GONZÁLEZ

miguel-vila @ github

PROFESSIONAL EXPERIENCE

Senior Software Engineer   Remote - US East Coast Timezone
[SiriusXM](#)   *November 2022 - Present*

· Member of the API tooling team, part of the platform services enablement organization.
· Develop tooling using Smithy, an AWS DDL language, empowering teams to describe, implement, and consume their services.
· Key projects include:
  · Developed a system for describing which Smithy services are implemented and consumed by applications, enabling package management and dependency tracing across the platform.
  · Implemented compatibility checks to verify service changes against potential data processing breakages.

· Contributed to a team implementing semantic search using vector embeddings stored in OpenSearch.
  · Set up infrastructure to ingest catalog data and generate embeddings using different models.
  · Set up a client to query the different indexes using the embeddings.

Lead Software Engineer ← Senior Software Engineer ← Software Engineer   United Kingdom
[Disney (formerly Disney Streaming Services)](#)   *January 2017 - October 2022*

· Built and maintained Disney+ and ESPN+ streaming platforms as a member of various engineering teams, utilizing Scala, Python, TypeScript, and AWS services.
· Developed and maintained commerce operation services, including subscription lifecycle management, collaborating with cross-functional teams on feature delivery.
· Participated in the evolution, migration, and unification of the subscription system.
· Led a project migrating one of the subscription system's clients to a next-generation version:
  · Crafted technical proposals and guided decision-making.
  · Collaborated with client teams through technical discussions to ensure thorough understanding of requirements and edge cases.
  · Conducted research to inform the implementation.
  · Improved documentation to streamline onboarding.
  · Decomposed project work into discrete, deliverable units.
· Other responsibilities and achievements included:
  · Designed and proposed new components to enhance the subscription management system's API and domain events, collaborating with engineers on design and behavior. Resulted in improved data quality for analytics and increased visibility into the subscription lifecycle.
  · Developed and maintained a component to detect subscription overlaps between partner-issued and existing user subscriptions, automatically applying pauses or discounts per business rules. This enhanced user experience and reduced customer service costs.
  · Onboarded new team members to the subscription team, providing domain primers and iteratively improving internal documentation.
  · Authored multiple technical proposals, presenting various options, advocating for preferred solutions, and decomposing them into actionable tasks for team execution.
  · Proposed and implemented a change to test-subscription creation logic, removing reliance on naming conventions. This enabled complex scenario testing for other teams, simplified test data identification and cleanup, and reduced storage costs.
· Developed user authentication, account management, and profile management services, including multiple Scala-based microservices, as part of a separate team.
  · Executed performance tests against these services to define appropriate scaling policies.
  · Helped establish the infrastructure for multiple projects.

Software Engineer   Colombia
[s4n](#)   *January 2013 - June 2016*

- Led a small engineering team, responsible for technical decision-making and mentoring new members on the tech stack (Java, Scala, JavaScript).
- Developed enterprise software for diverse clients, primarily in the insurance sector, using Java, Scala, and JavaScript.
- Developed a REST API using Scala for an international client in the United States.

Teaching Assistant for Design and Analysis of Algorithms — Colombia
Los Andes University — *August 2011 - May 2012*

- Evaluated student homework and exams. Organized and delivered preparatory lectures for exams.

Software Engineer — Colombia
CIACUA, Los Andes University — *March 2011 - August 2011*

- Participated in the software reengineering of an application used for the design and simulation of water distribution systems. Documented the design in UML and fixed bugs found in a version update.

EDUCATION

Recurse Center — *August 2016 - November 2016*
United States of America

Completed a self-directed, project-based residency for programmers, focusing on deepening expertise outside core specializations. Developed projects focused on distributed systems, concurrency, and functional programming.

Los Andes University — *January 2009 - December 2012*
Colombia

BSc in Systems and Computing Engineering

COMPLEMENTARY EDUCATION

- Senior Engineer to Lead: Grow and thrive in the role (via Maven), Completed 2025.
- Introduction to Corporate Finance, University of Pennsylvania (via Coursera), Completed 2024.
- Financial Markets (with Honors), Yale University (via Coursera), Completed 2021.

VOLUNTEERING

Climbing Clan — *April 2023 - October 2024*
Manchester, United Kingdom

Active member of a climbing community in Manchester. Volunteered periodically, teaching belaying techniques and assisting with administrative tasks.

ACHIEVEMENTS AND AWARDS

- *"Quiero Estudiar"* Scholarship. Awarded full scholarship for undergraduate studies at Los Andes University (October 2008).
- Qualified for the Latin American Regional International Collegiate Programming Contest (ICPC), 2011.
- Qualified for the Latin American Regional International Collegiate Programming Contest (ICPC), 2012.

TECHNICAL SKILLS

Programming Languages
(in order of skill): Scala, Java, Python, Javascript, TypeScript.
Infrastructure: Mostly AWS. Cloudformation, CDK, DynamoDB, Kinesis, ECS, CloudWatch.

OPEN SOURCE SOFTWARE CONTRIBUTIONS

Over the course of my career, I have contributed to numerous open-source projects. These contributions were often driven by project requirements—fixing bugs or adding features necessary for my work. Below are some of my most notable contributions:

· **scalaz #750**: Added new functionality, applying learned functional programming concepts.
· **zio-metrics #53**: Improved the external API of a metrics library for enhanced usability.
· **smithy-translate #42**: Fixed a critical bug in a dependency function, addressing an edge case unknown to maintainers and restoring library utility.
· **spotbugs #2988**: Fixed a bug in the SpotBugs static analysis tool related to reference comparison linting, addressing a common source of Java errors.
· **smithy #2221**: Extended OpenAPI conversion to correctly handle deprecated annotations.
· **opensearch-java #1005** & **opensearch-api-specification #304**: Extended the OpenSearch Java client to support text embeddings.
· **opensearch-api-specification #324**: Enhanced the OpenSearch API specification testing framework to allow step output chaining, enabling more complex test scenario execution.

SIDE PROJECTS

Personal projects available at: miguel-vila.github.io/side-projects.html