MIGUEL VILÁ GONZÁLEZ

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PROFESSIONAL EXPERIENCE

Lead Software Engineer ← Senior Software Engineer ← Software Engineer United Kingdom
Disney Streaming Services *January 2017 - Present*

- Working as part of multiple engineering teams building and maintaining Disney+ and ESPN+, Disneys streaming platforms. Some of the technologies I use include Scala, Python, TypeScript and several AWS products.
- Developing and maintaining services related to commerce operations including subscription lifecycle management. I collaborate with other teams in order to deliver cross-cutting features related to these services.
- Participated in the evolution of the subscription system, including some migrations and unifications.
- Lead a project in order to migrate one of the clients of the subscription system into a new generation version of the system:
  - Made technical proposals and steered the decisions.
  - Had technical discussions with the client team in order to make sure we understood the problem and possible edge cases.
  - Did research in advance of the implementation.
  - Improved our documentation in order to make it easier to onboard new members.
  - Split the work into deliverable units.
- Other responsibilities and achievements include:
  - Creating proposals for new components that improve the API and domain events of the subscription management system. Collaborating with other engineers in order to define the design and behavior of these new components. This resulted in an improvement in the quality of the data used in analytics and better visibility over the subscriptions lifecycle.
  - Developed and maintained a component that detects when subscriptions issued by partners overlapped with existing subscriptions for the same user. This results in the automatic pause of the subscription or a discount, depending on specific business rules. This provided a better experience for these users and costs savings in customer services operations.
  - Onboarded new members to the subscription team: gave them a primer on the domain and in response improved our own internal docs.
  - Made several technical proposals, proposing multiple options and arguing for the one I considered the best. I splitted proposals into separate tasks and other team members worked on them.
  - Proposed a change in the way test subscriptions are created so we wouldn't rely on a naming convention. This allowed other teams to test more complex scenarios and allowed us to easily identify test subscriptions and delete them, saving storage.
- As part of a different team I developed services for user authentication, account management and profile management. This included several microservices written in Scala.
  - Executed performance tests against those services in order to define sensible scaling policies.
  - Helped to establish the infrastructure of multiple projects.
- Some of the Scala libraries or frameworks we have used include:
  - ZIO: Most of our business logic is written using this. We have also used ZIO streams for some complex processing. We are also familiar with other libraries for logging and metrics.
  - akka-http: We use Akka for our server instance and some simple routing logic.
  - cats-effect: For some small components we have used it. We are familiar with the Tagless final style.
  - play: We maintain a service with an old version of Play Framework.
  - dynosaur: We use this for our DynamoDB codecs. We find it a better alternative to automatic derivation.
  - cats-core: We use data types like *NonEmptyList* and *NonEmptyMap* to better model our data. We have also used *Validated* in order to return multiple errors. In addition, we used typeclasses like *EitherT*.
  - circe: For JSON marshalling/unmarshalling. We have used automatic derivation but we are leaning towards not doing it anymore.
  - scalacheck: We mostly use this for encoding/decoding property tests. We also use it for a few complex business logic tests.
  - smithy4s: This and some internal libraries are used to create services instances from Smithy specs.

Software Engineer Colombia
s4n *January 2013 - June 2016*

- Technical leader of a small team of engineers. Responsible for technical decisions and training new team members in the use of the tech stack.
- Developed enterprise software for a variety of companies, primarily insurance companies. Used a variety of technologies: Java, Scala and JavaScript amongst others.
- Developed a REST API using Scala for an international client in the United States.
- Some of the Scala libraries or frameworks I used include:
  - akka-http: We used Akka for HTTP servers and actors.
  - play: We implemented several services with Play.
  - scalaz: We used some typeclasses and datatypes.

Teaching Assistant for Design and analysis of algorithms. Colombia
Los Andes University *August 2011 - May 2012*

- Evaluated students homework and exams. Organized and lectured classes in preparation for exams.

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

- Worked in the software reengineering process 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

Self-directed, educational retreat for programmers to focus deeply on areas of programming outside their specialization. Specifically, I developed projects related to distributed systems, concurrency and functional programming.

Los Andes University January 2009 - December 2012
Colombia

BSc in Systems and Computing Engineering

ACHIEVEMENTS AND AWARDS

- *"Quiero estudiar"* scolarship. This allowed me to study my undergrad at Los Andes University (October 2008).
- Classified to the latin american regional International Collegiate Programming Contest, 2011.
- Classified to the latin american regional International Collegiate Programming Contest, 2012.

TECHNICAL SKILLS

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

OPEN SOURCE SOFTWARE CONTRIBUTIONS

- **scalaz #750**: Added a new functionality. Was able to do this after learning some functional programming concepts.
- **zio-metrics #53**: Improved the API of a metrics library, making it easier to use.