HOW I BECAME AN ANALYTICS ENGINEER

Hello world!

I AM VICTORIA PEREZ MOLA

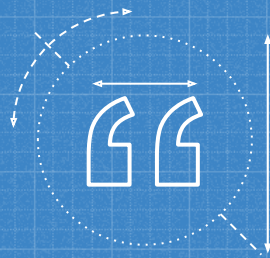I am here because I want to share how I found a job that I love.
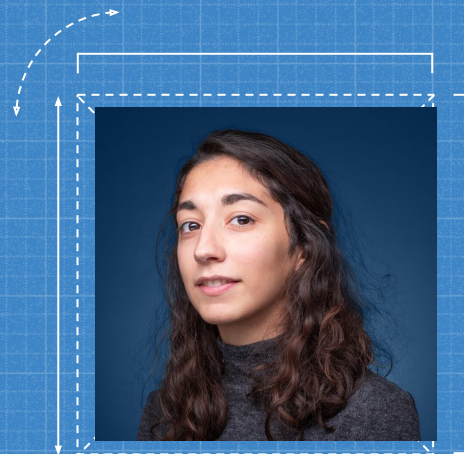
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THE ANALYTICS ENGINEER ROLE

Let's start with the important stuff

"We are looking for an expert in building out analytical data layers to join the band and help drive a data-first culture across the ad-supported business in Spotify"

ROLES IN A DATA TEAM

Introduces the good
software engineering
practices to the
efforts of data
analysts and data
scientists

Uses data to answer
questions and solve
problems.

Data Engineer

Analytics Engineer

Data Analyst

Prepares and maintain
the infrastructure
the data team needs.

Brings an analytical
and business-outcomes
mindset to the
efforts of data
engineering
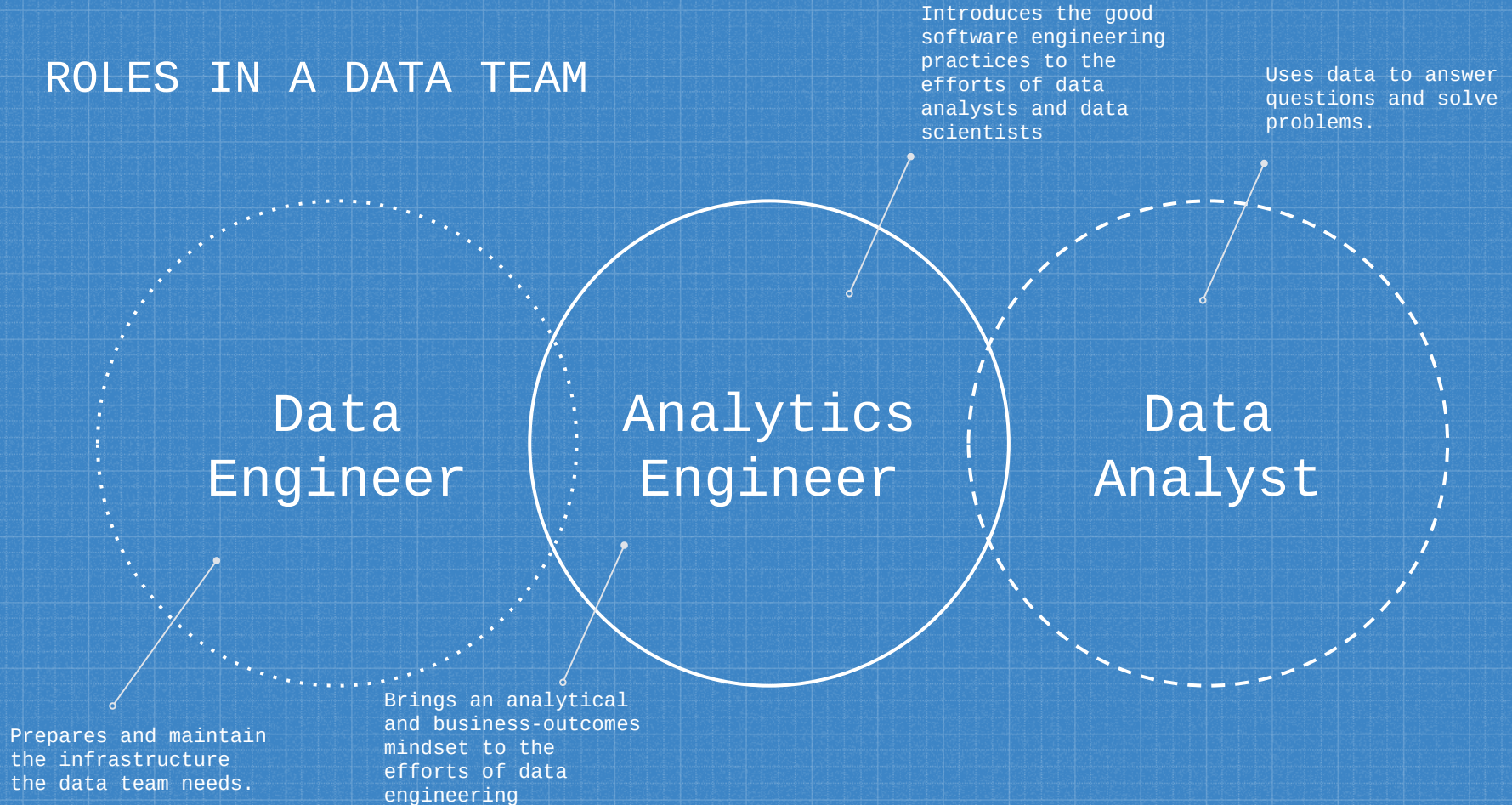
RESPONSIBILITIES

Data Engineer	Analytics Engineer	Data Analyst
• Build custom data integrations • Manage overall pipeline orchestration • Develop & deploy machine learning endpoints • Build and maintain the data platform • Data warehouse performance optimizations	• Provide clean, transformed data ready for analysis • Apply software engineering best practices to analytics code (ex: version control, testing, continuous integration) • Maintain data documentation & definitions • Train business users on how to use data visualization tools	• Deep insights work (ex: why did churn spike last month? what are the best acquisition channels?) • Work with business users to understand data requirements • Build critical dashboards • Forecasting

TOOLING

Cloud data
warehouses like
Snowflake, Bigquery,
Redshift

Data Storing

ETL tools like
Fivetran, etleap or
Stitch

Data loading

Tools like dbt or
Dataform

Data modelling

BI tools like Looker,
Mode or Tableau

Data presentation

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HOW DID I GET TO THE ANALYTICS ENGINEER ROLE

Let's get personal

MY GEOGRAPHIC JOURNEY

Where I
landed

Where I
started
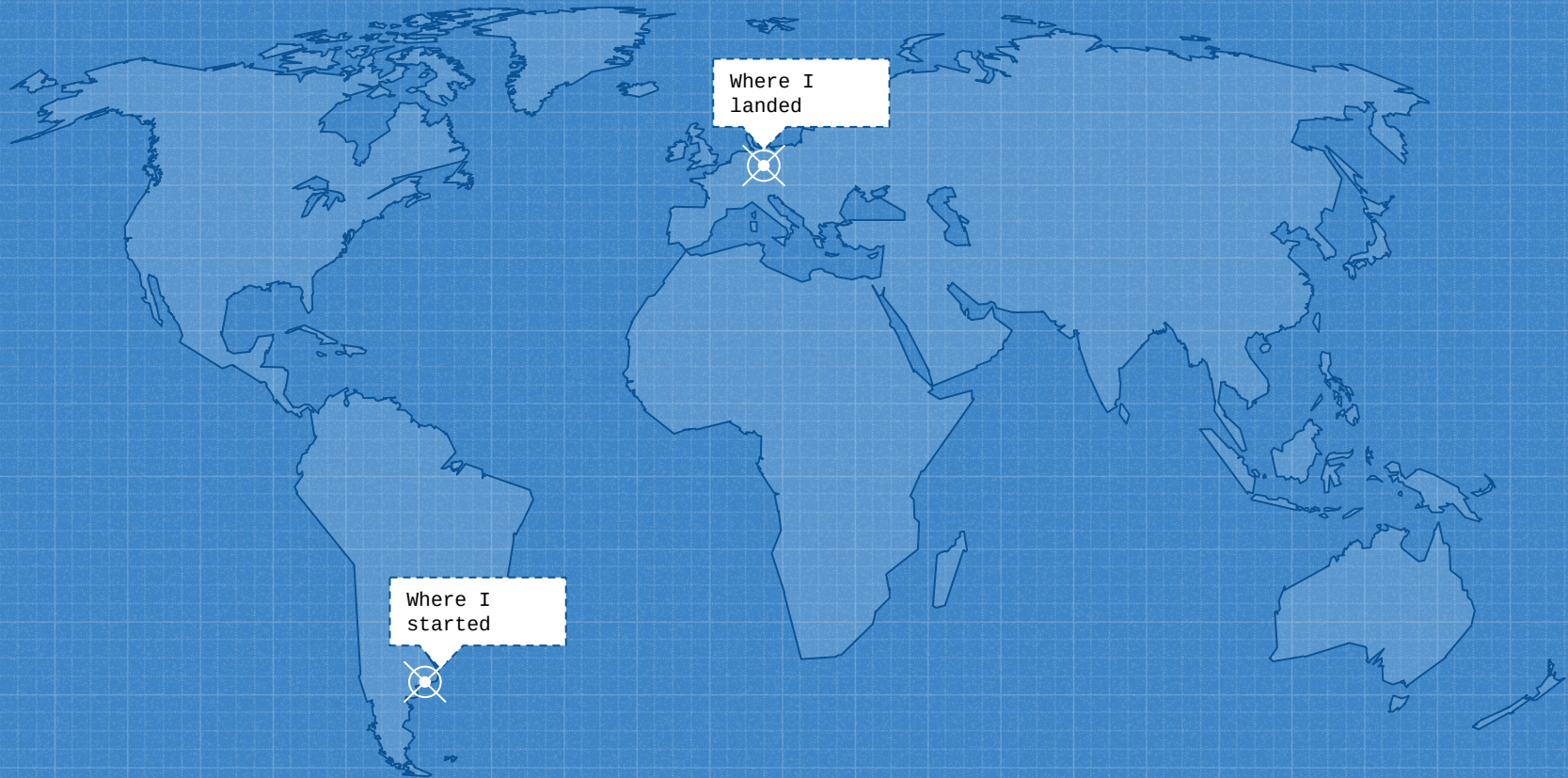
MY TECHNICAL JOURNEY

Started studying
Systems Engineer

Finished
University

Moved to Berlin &
started working as
IT systems
specialist

Started working as
Analytics Engineer

| 2010 | 2014 | 2015 | 2015 | 2018 | 2019 | 2020 |

First job in IT as
a Technical and
functional
implementer

Started working
as a consultant

Changed jobs
to SQL developer

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HOW CAN YOU GET TO THE ANALYTICS ENGINEER ROLE

Let's get to the useful stuff

LET'S REVIEW SOME CONCEPTS

Databases

General understanding about relational databases and data warehousing concepts.

Data modelling

- Relational model
- Kimball's Dimensional Modelling
- Inmon data modelling
- Data Vaults

SQL

From basic queries to CTEs and window functions.

Data pipelines

ETL vs ELT

Reporting

General knowledge on how to present the data using data visualisation tools.

Good practices

Software engineering best practices for code development.

Thanks!

ANY QUESTIONS?

You can find me at:

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@victoriaperezmola

CREDITS

Special thanks to all the people who made and released these awesome resources for free:

- Presentation template by SlidesCarnival
- Photographs by Unsplash
- The Analytics Engineer by Michael Kaminsky
- Analytics Engineering at Spotify
- Analytics at Netflix: Who We Are and What We Do
- What is Analytics Engineering?
- Analytics readings