

Weather Analytics Dashboard



Aldric Pinto, Tanak Patel, Trevor Hitchcock

Meet the Team



Aldric Pinto

M.S Data Science

New Haven, CT, USA



Tanak Patel

M.S Data Science

West Haven, CT, USA



Trevor Hitchcock

M.S Data Science

Milford, Connecticut, USA

Business Problem

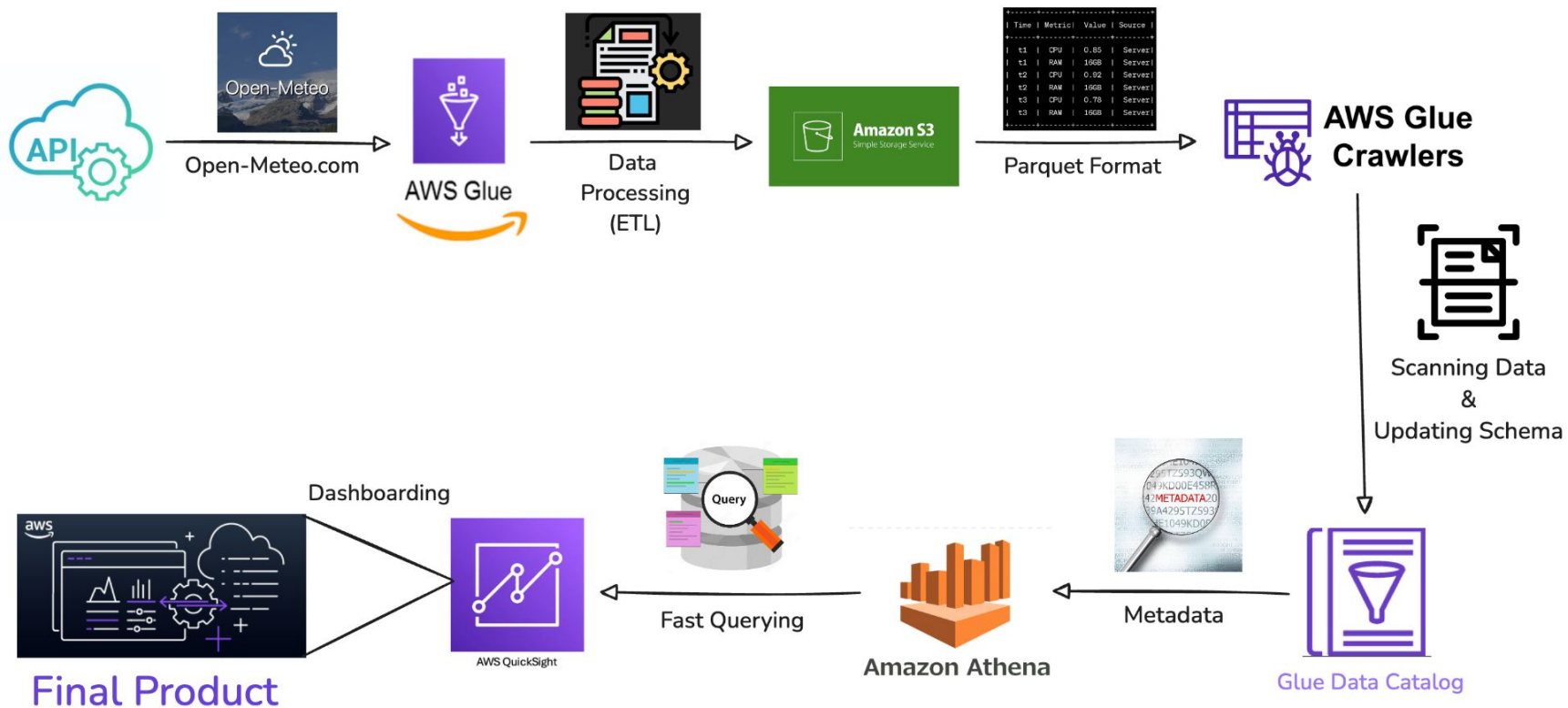
- Weather conditions significantly impact various industries
 - Transportation, agriculture, energy sectors, etc.
- Real-time and historical weather data are often unstructured
 - Difficult to analyze trends and derive useful insights
- We can solve this by building a scalable, cloud-based Weather Analytics Dashboard
 - To processes, transform, and visualize weather data efficiently.

Business Solution

We propose building an **AWS-based Weather Analytics Dashboard** that:

- Fetches weather data from **Open-Meteo API**.
- Processes data using **AWS Glue**.
- Stores transformed data in **AWS S3 (Parquet format)**.
- Uses **a Crawler** to update the schema.
- Enables fast querying using **Amazon Athena**.
- Creates visual reports using **Amazon QuickSight** for data-driven decision-making.

Architecture Diagram



Thank You !