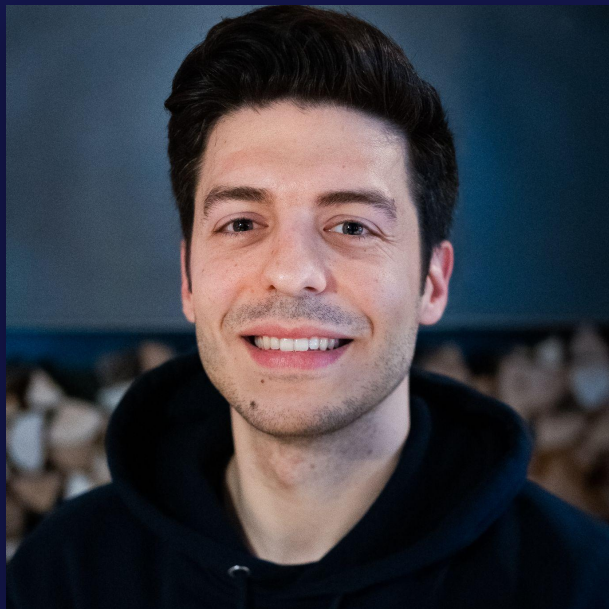




■ Quix Streams

Real-time processing with Quix streams

Hi



Javier Blanco

Senior Data Scientist



Quix Data Streaming



Orange

- Federated Learning
- MMM
- Churn



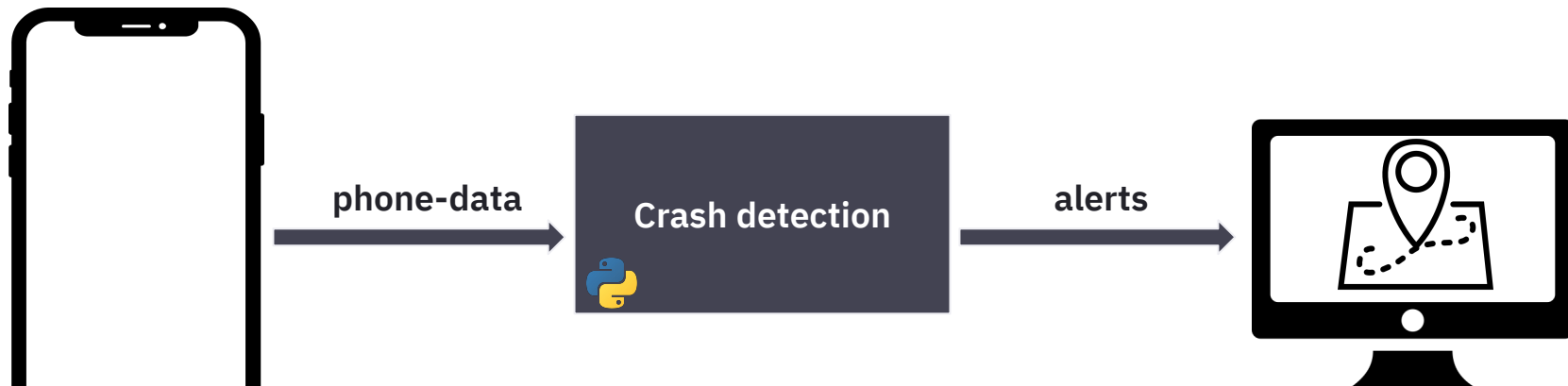
Areas of interest:

- Real time
- Causality
- Keeping it simple



The Challenge

Today's session goal





Poll

Are you familiar with streaming technologies
(Kafka topics, pub/sub, etc.)?



Streaming

VS Batch

Batch

Data Processing

Data is collected over time into a database.

At some point data is loaded from the database into the processing system.

- Operations are easy to compute: all historic data is present
- Results are not in real time



</>

t	G _x	G _y	G _z	G _T	ΔG
t ₁	0.1	1.0	0.2	1.3	
t ₂	0.2	1.1	0.1	1.4	0.1
t ₃	0.1	0.9	0.1	1.1	-0.3
t _n	0.3	1.0	0	1.3	1.3 - G _{T_{n-1}}

■ Streaming

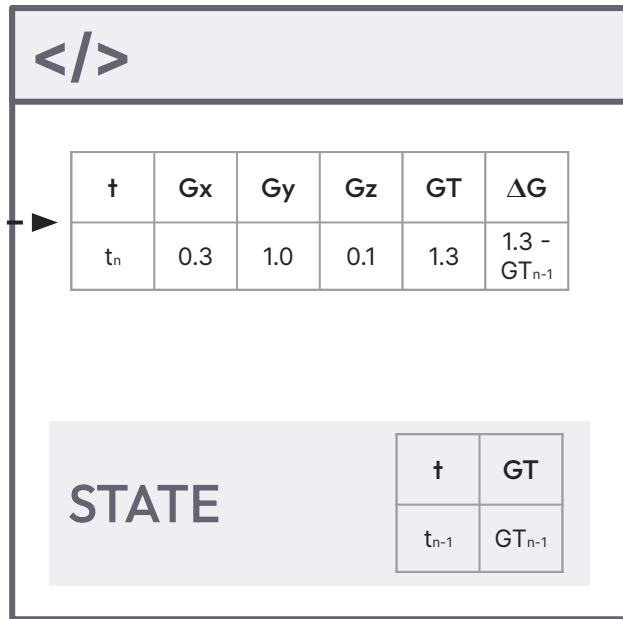
Data Processing



Data is collected over time into a streaming broker (like a Kafka topic).

The processing system consumes the data as soon as it is published into the topic.

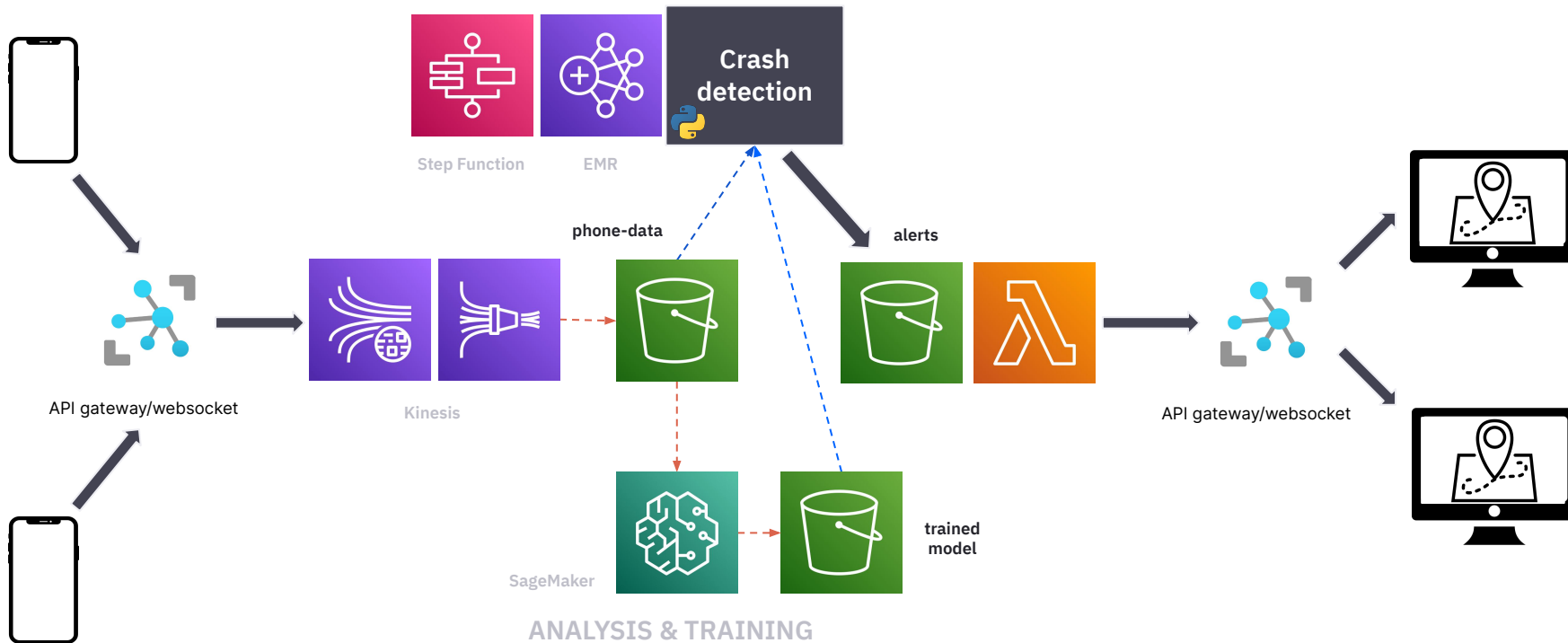
- Operations are not always easy to compute: state is used to keep necessary historic data
- Real time results





Batch

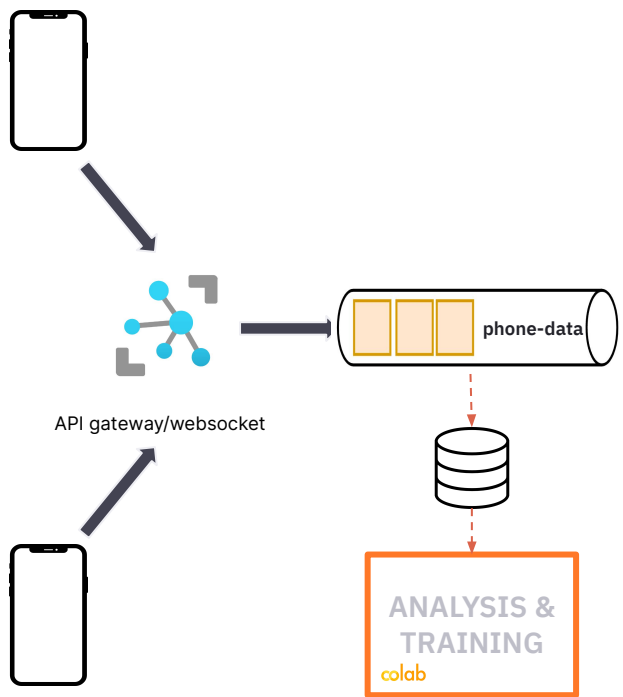
Batch architecture





Streaming

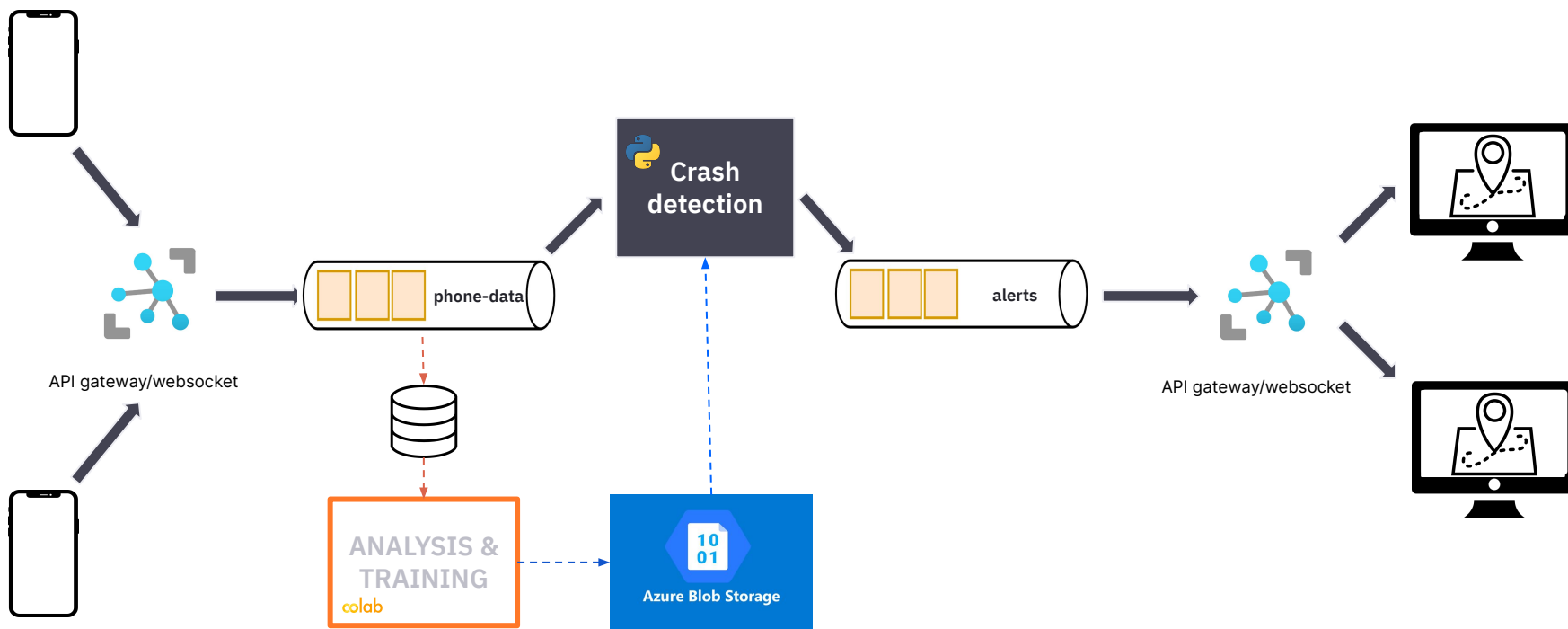
Streaming architecture





Streaming

Streaming architecture





Quix

Simple streaming



Founded by F1 Engineers



Built by experts

A combined 30+ years of experience solving real-time data processing in the most extreme, time-critical environment

Confidential and proprietary to Quix Analytics Limited

Enterprise-grade, production ready

700+ accounts

>750GiB streamed monthly

>11B messages monthly

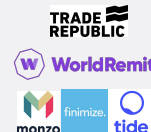
Backed by top-tier investors

Backed by £15m million in funding, with expert advisors and investors from top tech companies

Project A

passion
capital

MMC
ventures



Validated by major brands

From household names to startups, developers trust Quix to handle mission-critical workloads

McLaren

Deloitte

CloudNC

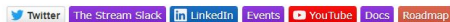
CONTROL
ADVANCED CONNECTED SOLUTIONS

M
voi.



Quix

Simple streaming



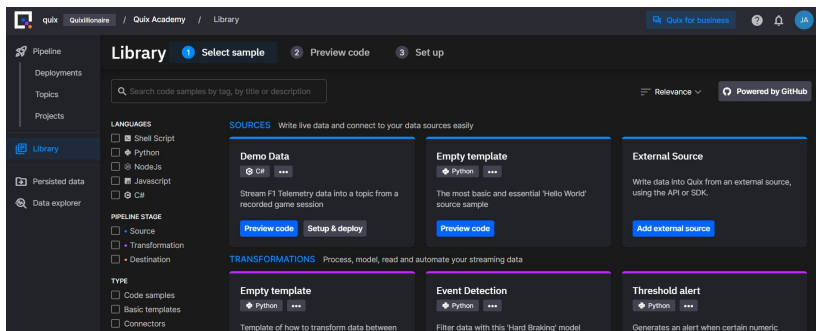
Quix Streams

Open source stream processing library, focused on time-series data and ease of use. It uses a message broker (as Kafka), instead of a database, so you can process time series with performance, low resources and no delay.



SaaS Platform

Platform to quickly build, test and run real-time data pipelines that power next-gen apps. It gives data teams the freedom to work on streaming data directly in Kafka using Python and Kubernetes without the complications you'd expect.





Quix Streams

Pub/Sub/Processing





Kafka Topic

Streaming Broker

■ Topic

Infrastructure where data is streamed:



Topic

■ Pub

Publishing data to the topic

■ Publish

A data producer publishes data to the topic.





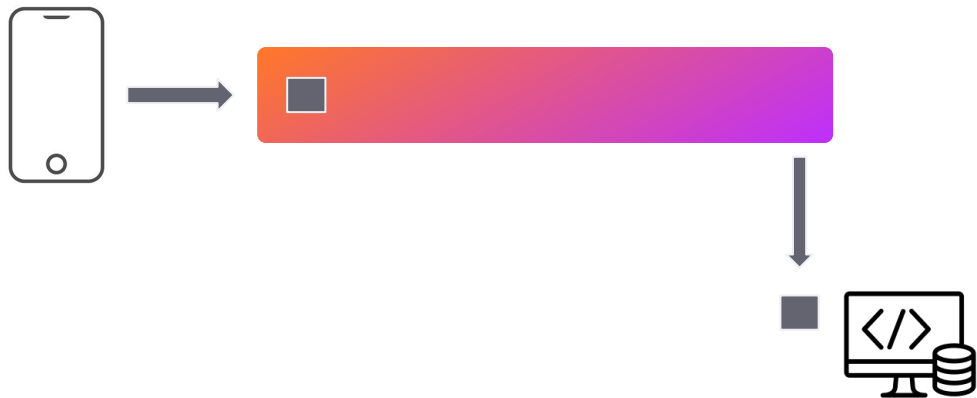
Sub

Subscribing to the topic data



Subscribe

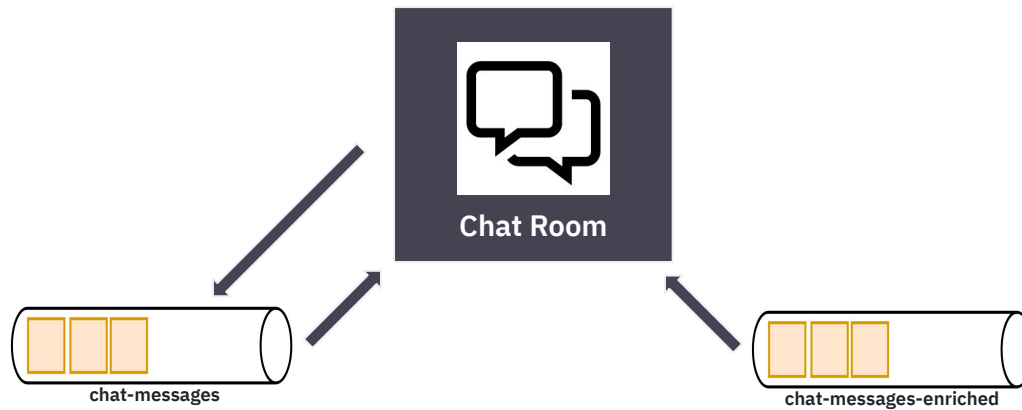
A data consumer subscribes to data in the topic.





Processing Data

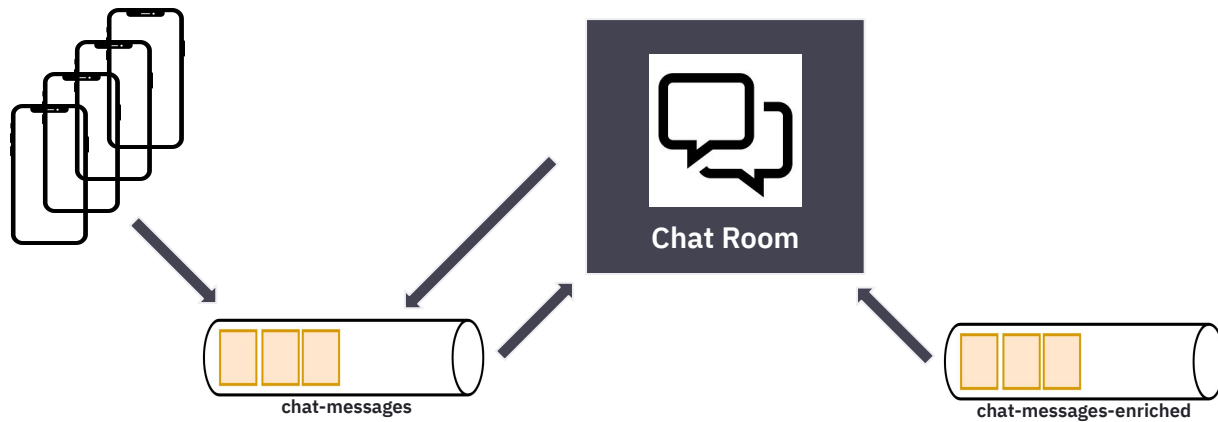
Sub/Process/Pub





Processing Data

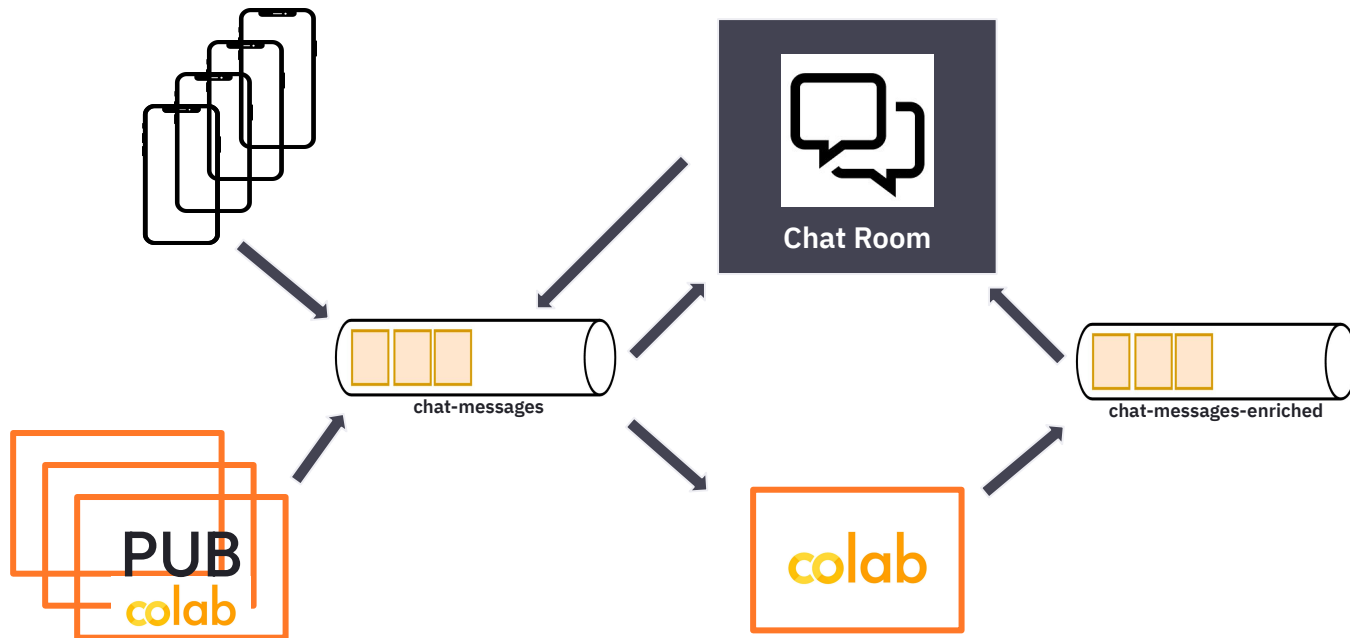
Sub/Process/Pub





Processing Data

Sub/Process/Pub





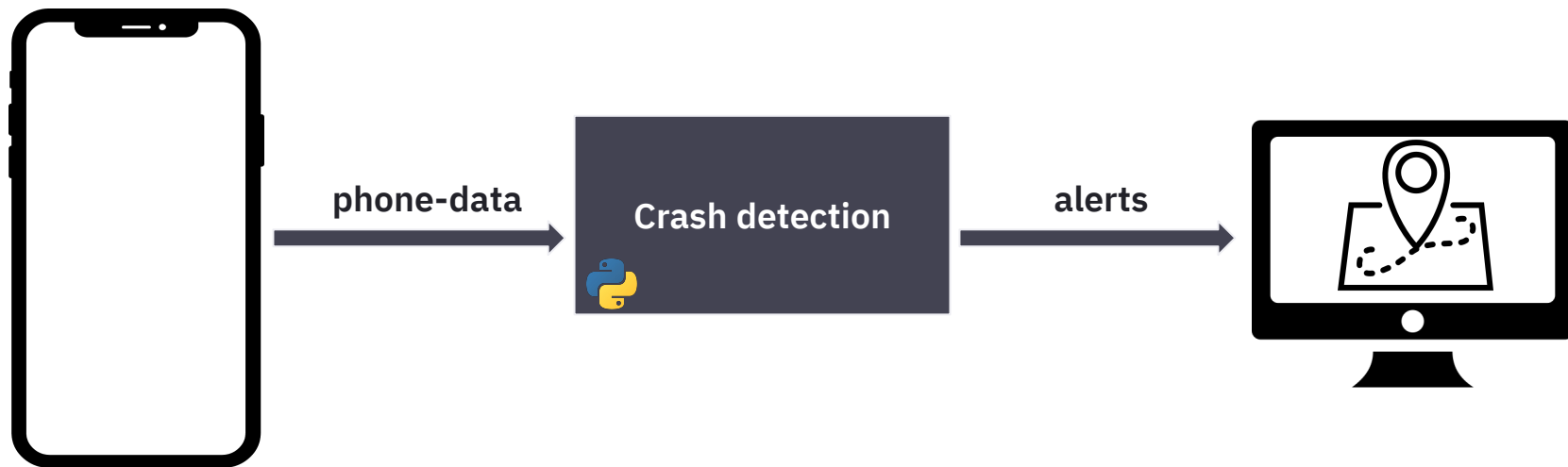
Quix Streams

Escaling



The Challenge

Today's session goal



Android users: Download Quix Tracker from Google Play



Android App

Go to settings

Menu/Settings



Scan QR code

Use "SCAN QR CODE" to autocomplete some fields.



Edit fields

Change your name and add “phone-data” to Topic field.

Star Quix Streams


Open Source project



GitHub

We need you

To make this open source initiative the library you want.

Star our repo 

Thank you

If you have any questions etc...
Any additional sign off text to go here.



info@quix.io | www.quix.io