



ITMINDS

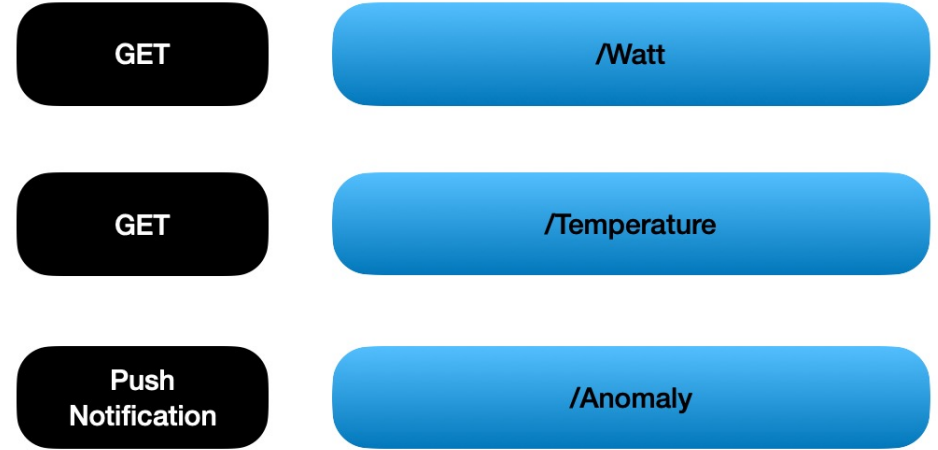
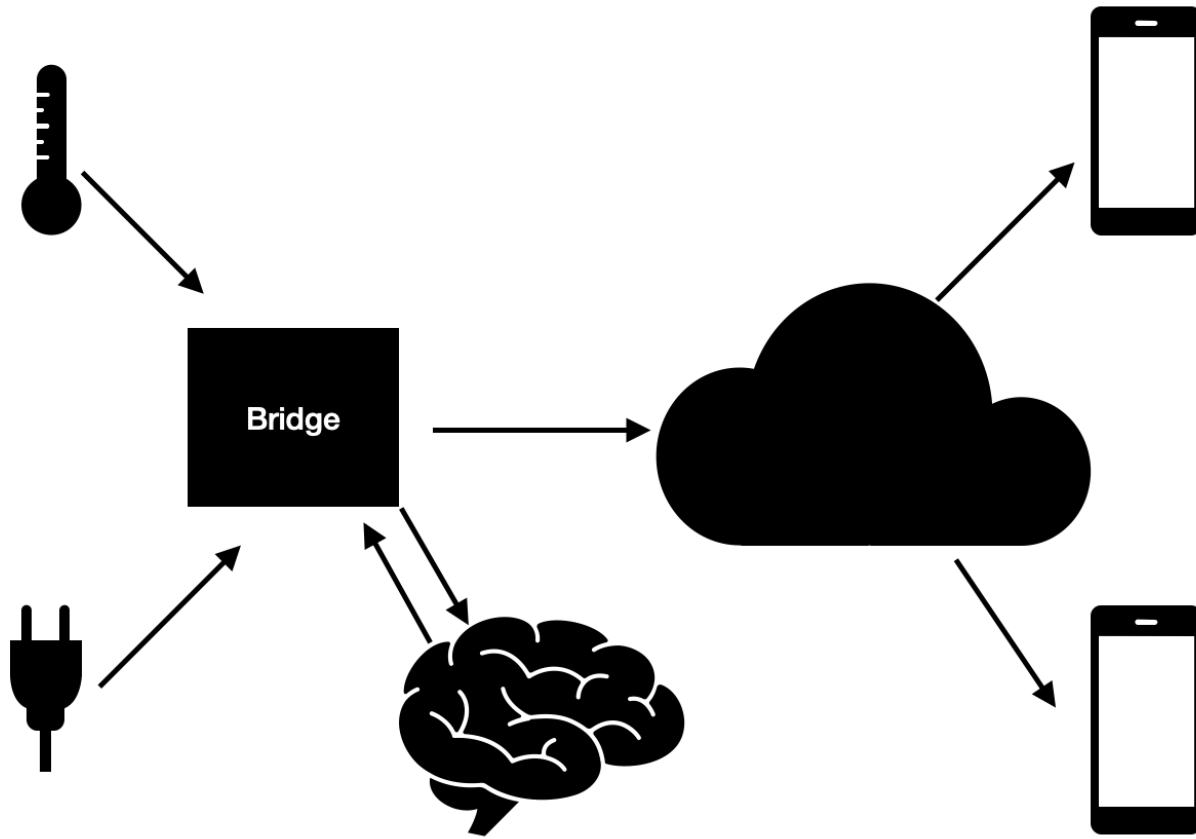
**A DISTRIBUTED IOT SYSTEM BUILT TO LIMIT ENERGY
CONSUMPTION INSIDE INDUSTRIES**

WHAT HAVE WE WORKED ON?

- A SYSTEM BASED ON DIFFERENT SENSORS TO COLLECT DATA REGARDING THE ENERGY CONSUMPTION
- AN OPEN-SOURCE API ABLE TO COMMUNICATE WITH A MOBILE APPLICATION
- AN AI BASED NOTIFICATION TOOL



THE ARCHITECTURE



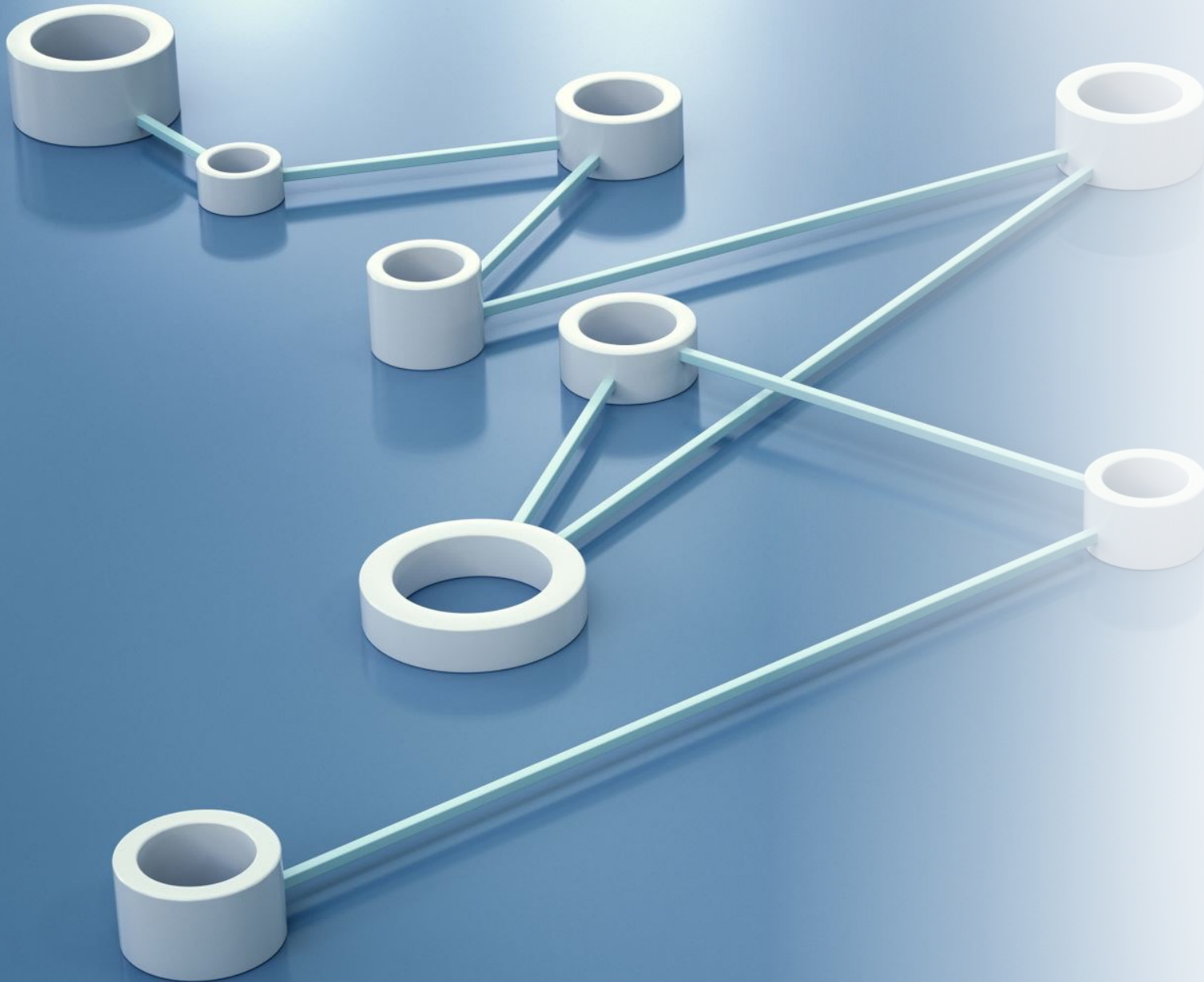
```
GET http://127.0.0.1:8000/api/temperatures/ Try
```

Params Headers Body

Query Params

Body Headers (10) Status Code 200 OK

```
1 {
2   {
3     "id": 1,
4     "sector": {
5       "id": 1,
6       "name": "sec1"
7     },
8     "value": 10,
9     "timestamp": "2023-11-11T10:54:00.130537Z"
10  }
11 }
```



DATA COLLECTION

**SMART SENSORS CAN
COMMUNICATE WITH A
BRIDGE IN DIFFERENT
WAYS.**

**THE BRIDGE IS
CONNECTED WITH A
DATABASE
IMPLEMENTED
FOLLOWING THE
REST PARADIGM**

DATA REPRESENTATION

THE DATA ARE
REPRESENTED IN A
FUNCTIONING MOBILE
APP THAT USES BOTH
GRAPHS AND
NUMERICAL
INDICATORS IN ORDER
TO GUARANTEE A
SIMPLE INTERACTION
WITH THE SYSTEM



The background of the image is a complex digital circuit board. It features a dense network of glowing blue and orange traces that represent data paths. In the upper right quadrant, there is a rectangular area containing binary code (0s and 1s) in a glowing blue font. The overall aesthetic is high-tech and futuristic, with a dark blue background and bright, neon-like highlights from the circuit traces.

AUGMENTATION-AI

THE CAPABILITIES OF THE DIGITAL TWIN HAVE BEEN AUGMENTED WITH THE USE OF A CLASSIFICATOR THAT ADVISES THE USER, WITH A PUSH NOTIFICATION, WHEN THERE ARE UNUSUAL CONSUMES OF ENERGY