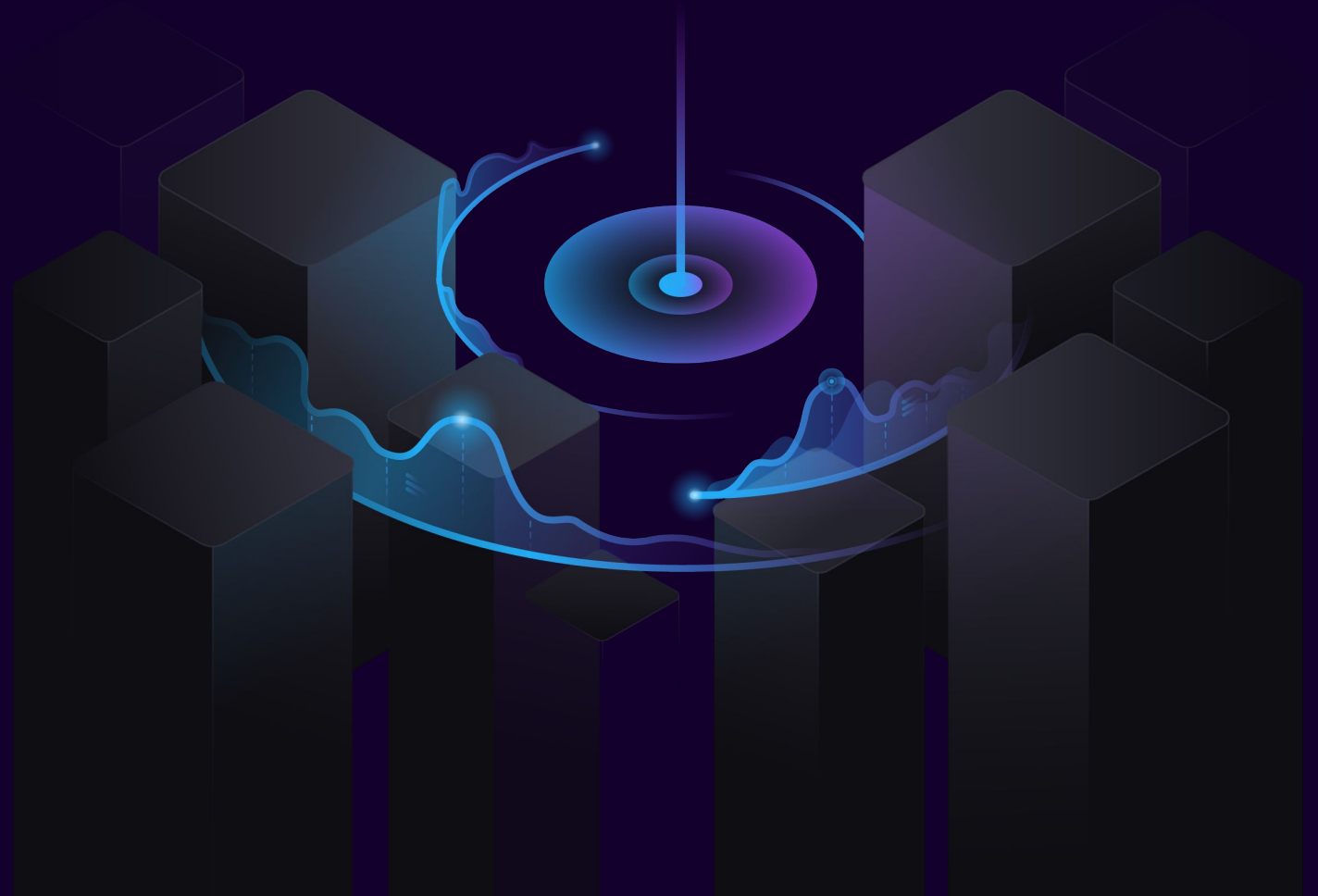




IoT Center

Introduction



Bonitoo – SW Engineering Company

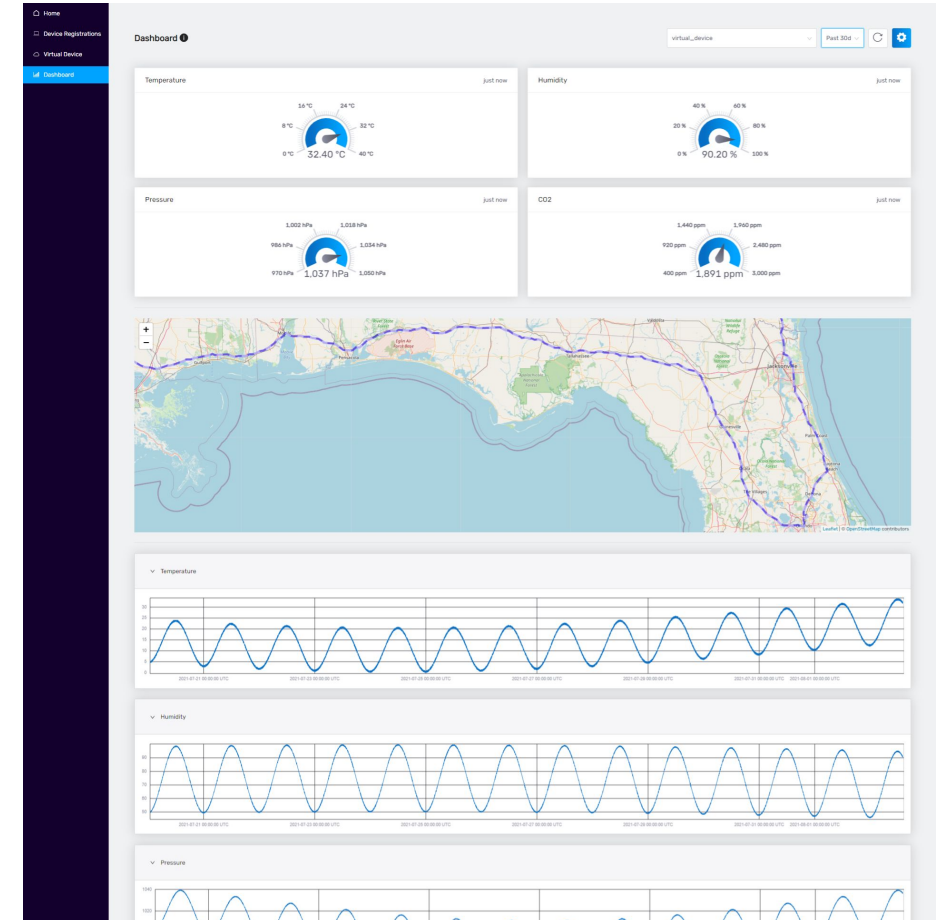


- End-to-end **R&D Services** (architecture, agile development, documentation, support, hosting, operation)
- Development of custom **monitoring** solutions
- Strong team of **professionals** (development for SaaS Startups, Enterprise Software, Mobile applications)
- **InfluxData consulting partner**
Delivered Client Libraries and other deliverables

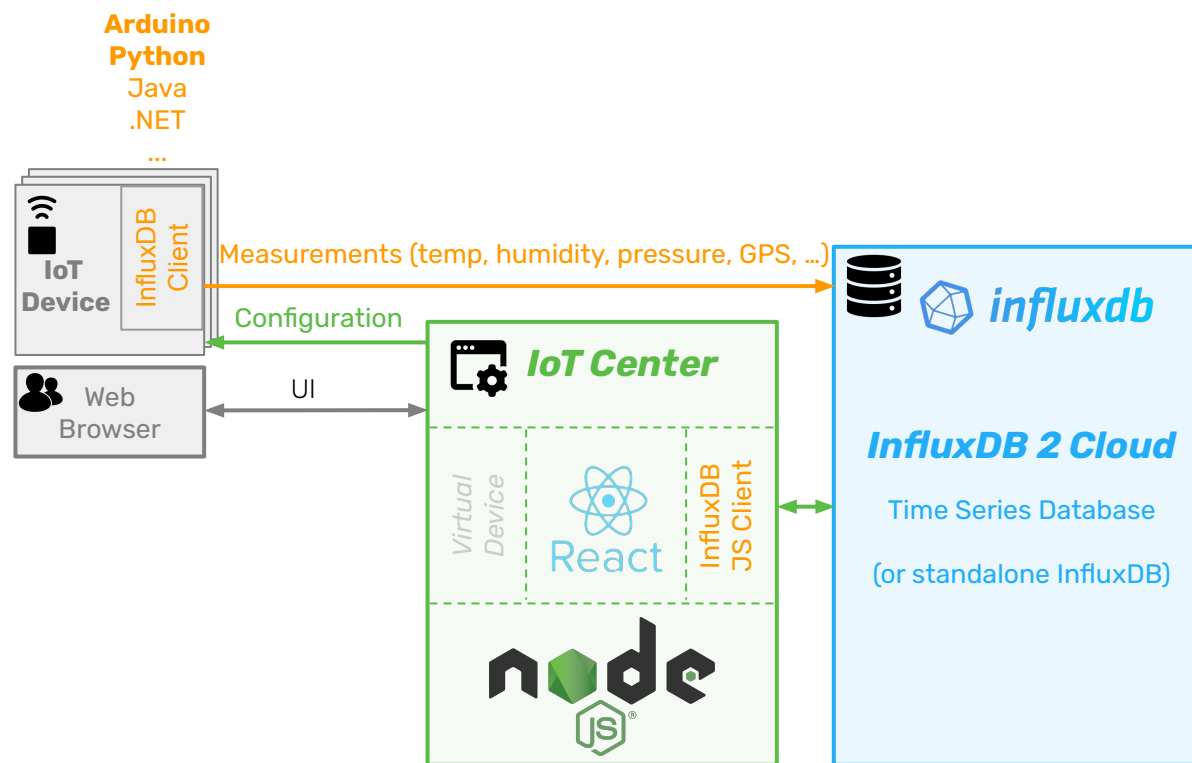


What is IoT Center?

- Simple **demo** application
- How to integrate **InfluxDB**
 - Write measurements
 - Query database
 - Manage InfluxDB
- Based on **Node.js** and **React**
- **IoT Devices** example (out of scope of this workshop)
- Embedded **Virtual Device**
- Links to source code - **GIT**
- No DB installation - InfluxDB **Cloud**



IoT Center Architecture



IoT Center

Three functions

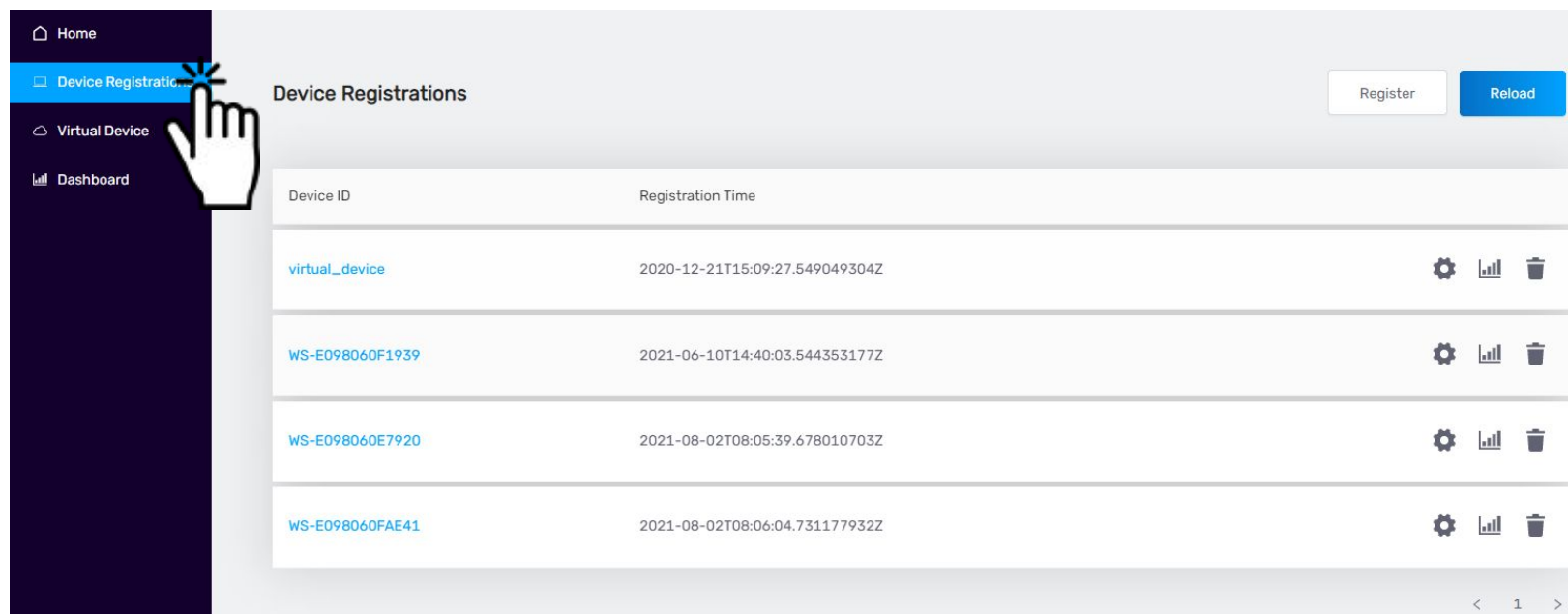
- **Device Registration** – register new IoT Devices
- **Virtual Device** – emulate IoT device
- **Dashboard** – show measured data from the IoT Devices



Devices Registration













Left menu

- **Devices Registration**



Device Registrations

Register Reload

Device ID	Registration Time	
virtual_device	2020-12-21T15:09:27.549049304Z	  
WS-E098060F1939	2021-06-10T14:40:03.544353177Z	  
WS-E098060E7920	2021-08-02T08:05:39.678010703Z	  
WS-E098060FAE41	2021-08-02T08:06:04.731177932Z	  

< 1 >



Virtual Device - Generate demo data

Left menu

- **Virtual Device**

Top screen

- **Button** with pencil

Home

Device Registrations

Virtual Device

Dashboard

Virtual Device

Device Configuration

Device ID	virtual_device	Registration Time	2020-12-21T15:09:27.549049304Z
InfluxDB URL	https://us-west-2-1.aws.cloud2.influxdata	InfluxDB Organization	iot-center-workshop@bonitoo.io
InfluxDB Bucket	iot_center	InfluxDB Token	***

Measurements

Field	min	max	max time	entry count	sensor
CO2	780	2620	2021-07-27T01:02:00Z	10080	virtual_CO2Sensor
Humidity	48.8	99.9	2021-07-27T01:02:00Z	10080	virtual_HumiditySensor
Lat	28.53	36.22	2021-07-27T01:02:00Z	10080	virtual_GPSSensor
Lon	-104.2	-77.75	2021-07-27T01:02:00Z	10080	virtual_GPSSensor
Pressure	970	1040	2021-07-27T01:02:00Z	10080	virtual_PressureSensor
TVOC	506	1744	2021-07-27T01:02:00Z	10080	virtual_TVOCSensor
Temperature	0	24.1	2021-07-27T01:02:00Z	10080	virtual_TemperatureSensor

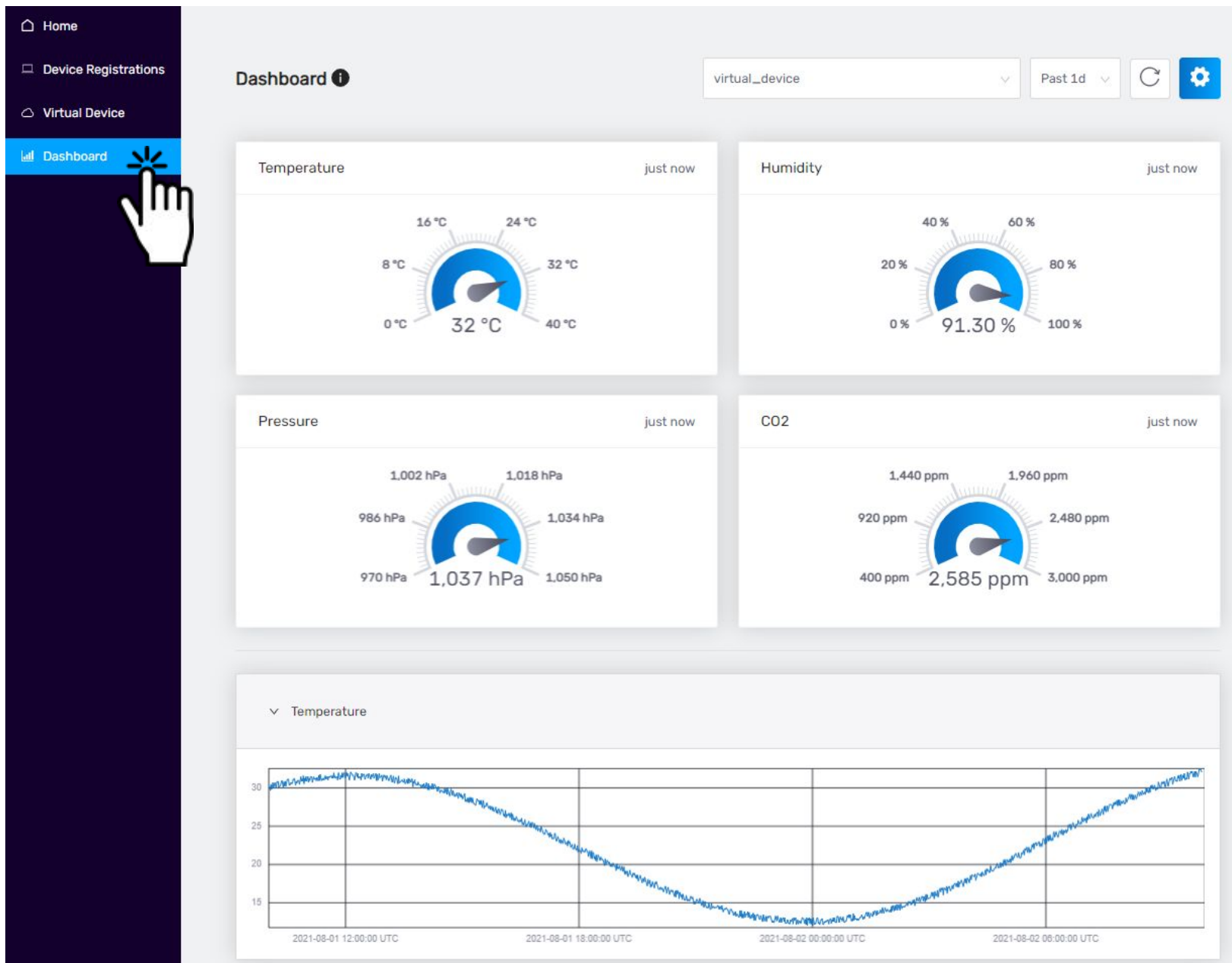
Visualisation

Left Menu

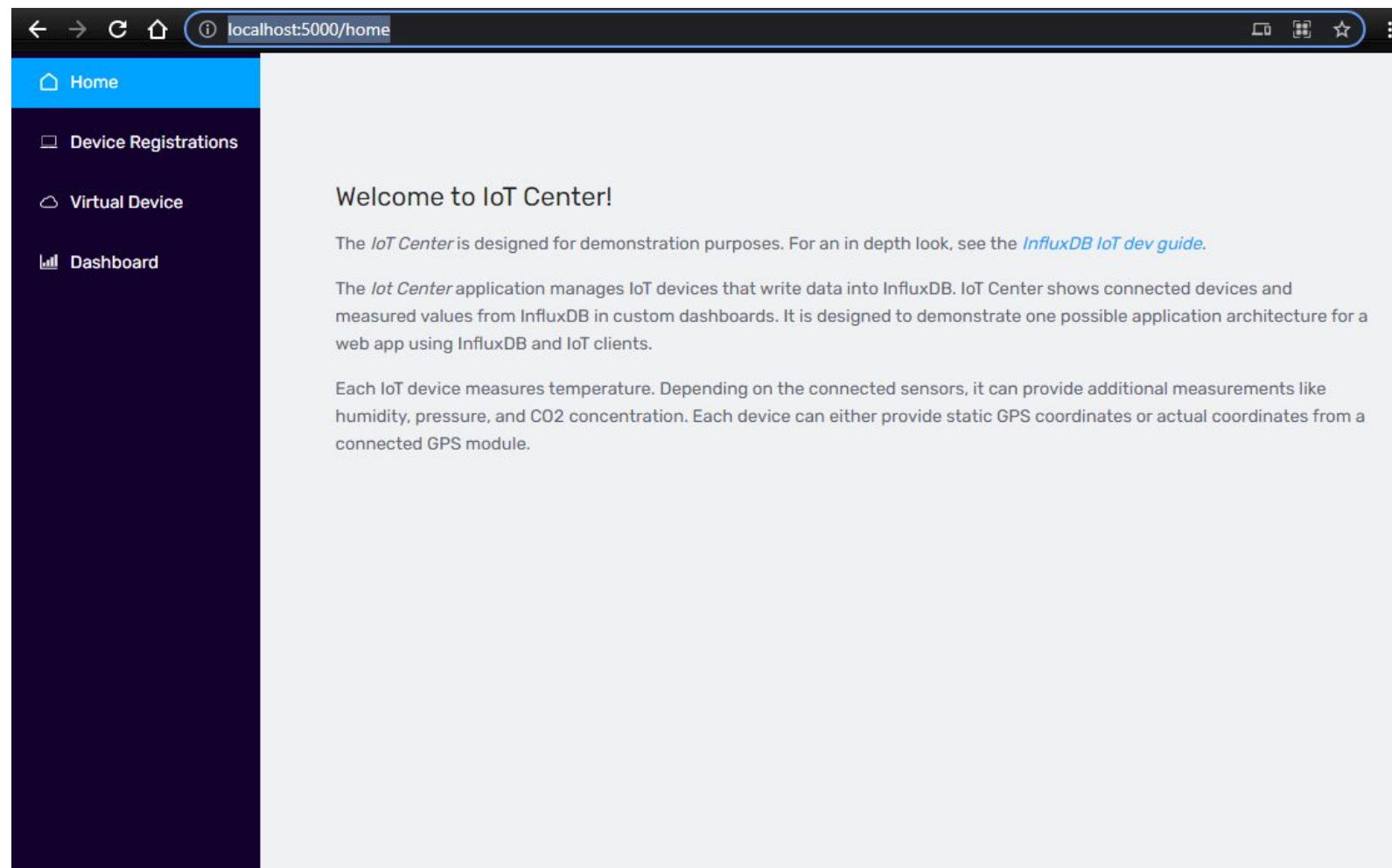
- **Dashboard**

Filters

- **Device**
- **Time**



IoT Center Demo



Link - <http://localhost:5000>



Source code organization

<https://github.com/bonitoo-io/iot-center-v2>

Directories

- app
 - server
 - ui
- client_arduino
- client_python

The screenshot displays the GitHub repository page for `bonitoo-io/iot-center-v2`. The repository has 3 watchers, 4 stars, and 2 forks. The main navigation bar includes links for Code, Issues (1), Pull requests, Actions, Projects, Wiki, Security, and Insights. The repository is currently on the `master` branch, with 6 branches and 0 tags. The commit history table shows the following entries:

Commit	Message	Time
<code>a2df516</code>	fix: use CircleCI image with Docker version: "19.03.13" (#15)	4 months ago
	chore: update PR template	5 months ago
	chore: VSCode chrome debug	5 months ago
	Add startup scripts	3 days ago
	Formatting improvements	2 months ago
	feat: added sensors tag to Python client (#16)	4 months ago
	feat: python client uses real data from bme280 and freegeoip (...)	5 months ago
	feat: add docker-compose.yml and templates for GitHub (#1)	5 months ago
	chore: add license	6 months ago
	chore: update readme	last month
	chore(ci): update InfluxDB to v2.0.4 (#31)	4 days ago

The README.md file is visible, titled "IoT Center v2". It states: "This repository contains the IoT Center application that provides a web UI that shows how to use InfluxDB v2 in various use cases. It also contains independent clients that write into InfluxDB."

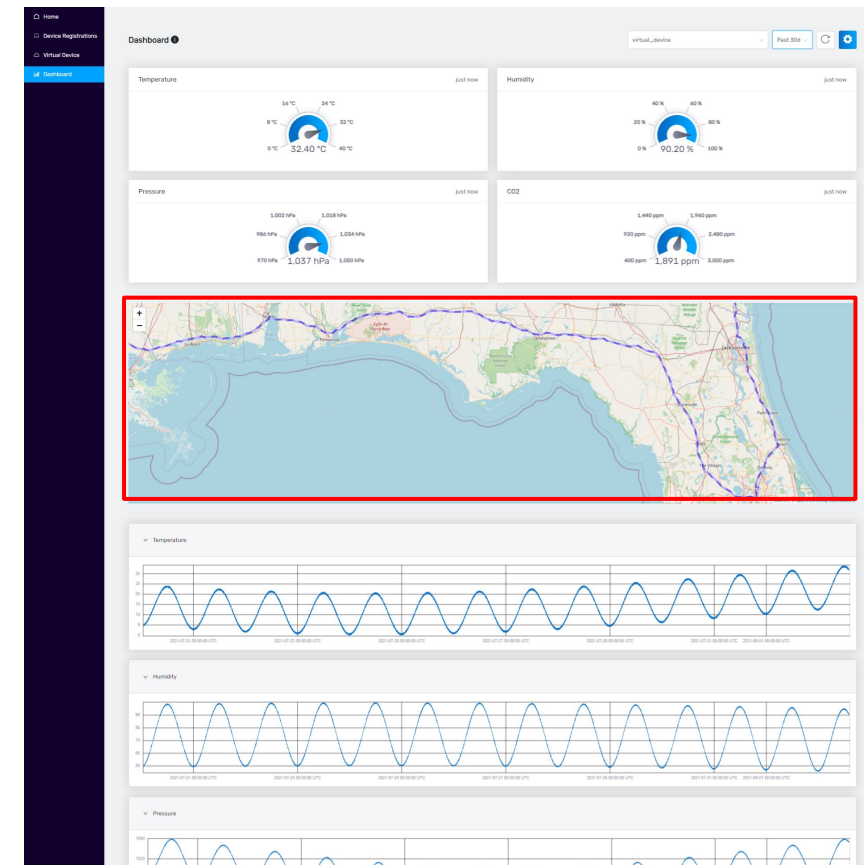
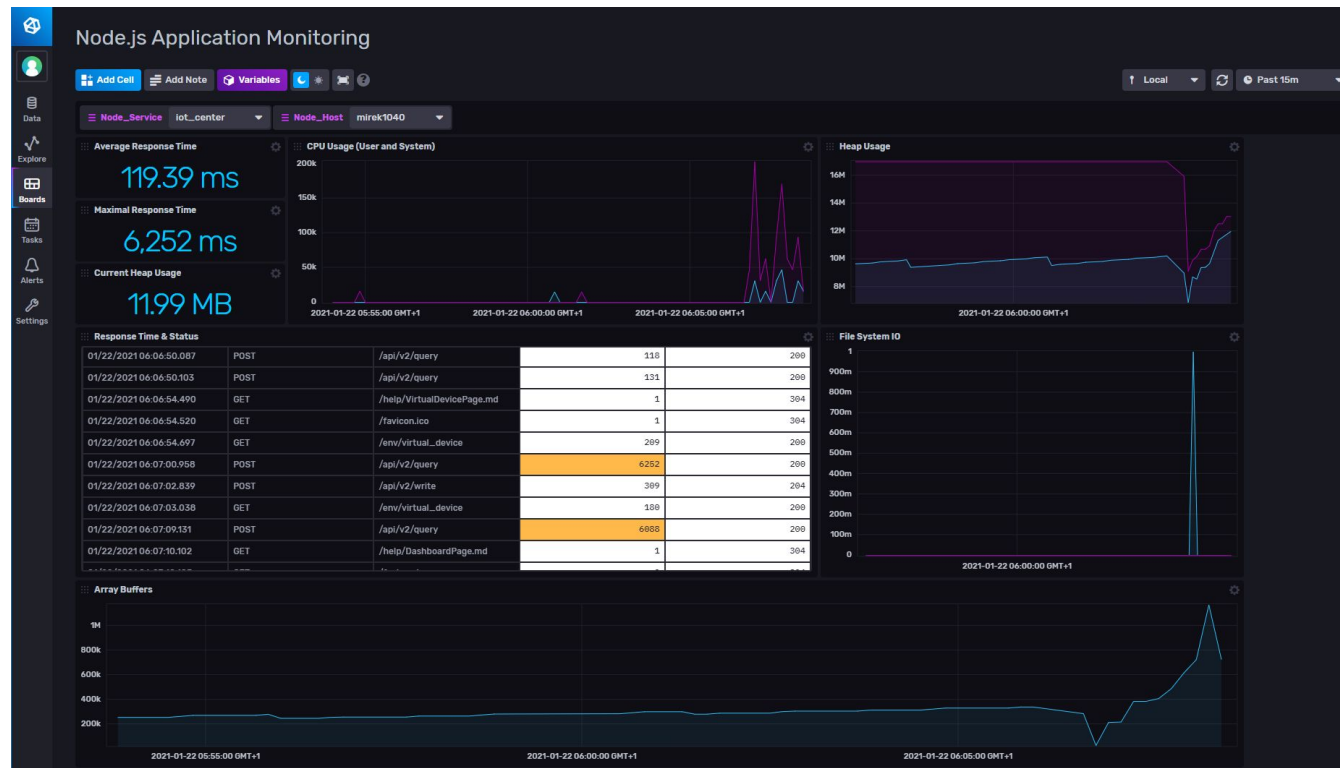
On the right side, the "About" section describes the project as "IoT Center v2" with a README and MIT License. The "Releases" section indicates no releases are published. The "Packages" section shows the `iot-center` package published nightly. The "Contributors" section lists 5 contributors. The "Languages" section shows the following language distribution:

Language	Percentage
TypeScript	54.3%
C++	20.3%
JavaScript	16.8%
Python	4.8%
HTML	1.5%
Dockerfile	0.8%
Other	1.5%



Goal of this workshop

1. Extend visualisations - add GEO widget
2. Node.js applications monitoring



Documentation

1. Help windows embedded into IoT Center
2. Dev guide <https://influxdata.github.io/iot-dev-guide>

