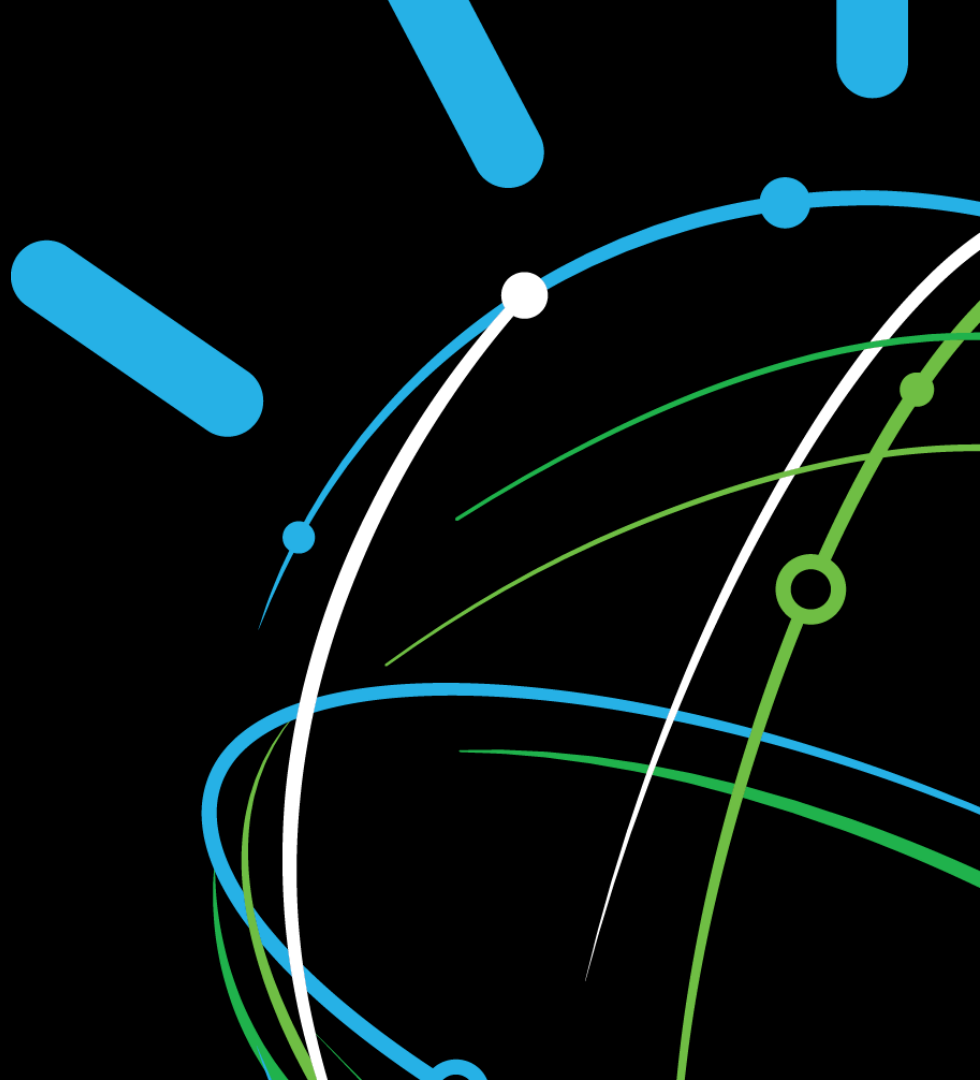




IBM Watson in the epicenter of developers attention

Clémence Lebrun, IBM





Clemence Lebrun, Developer & Developer Advocate Europe
IBM Cloud

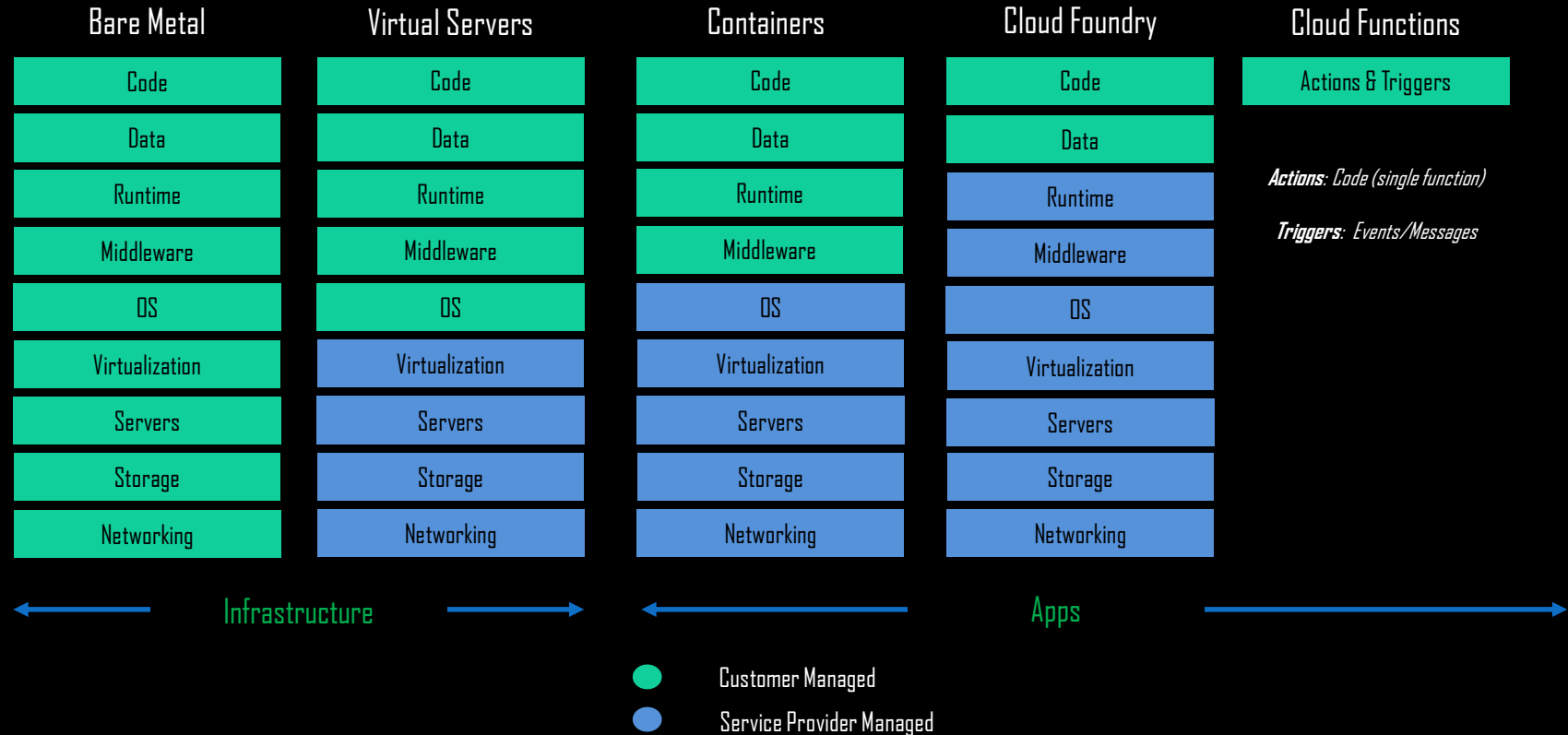
clemence.lebrun@fr.ibm.com | @ClemenceLebrun | cclebrun

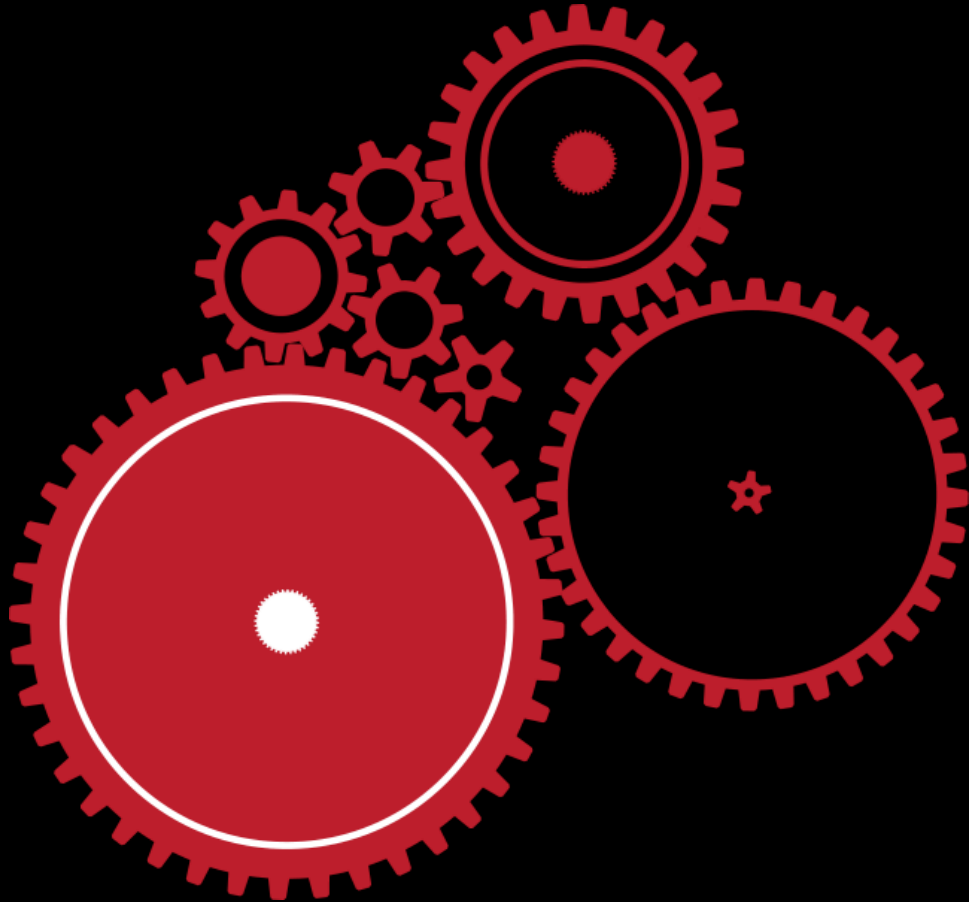




Don't start from scratch

Cloud Computing – Levels of Responsibility

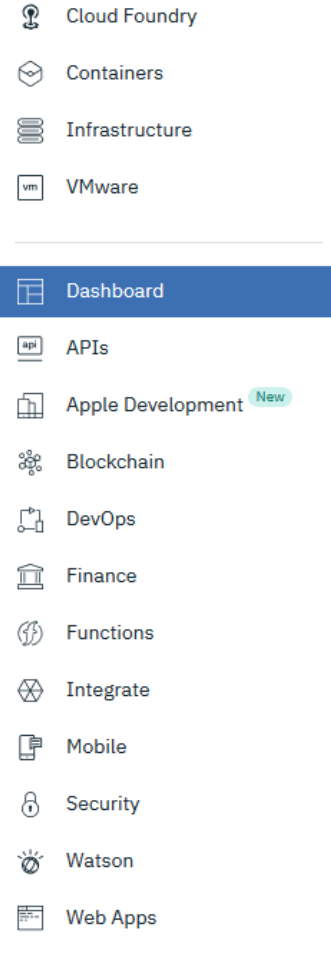




**Don't reinvent
the wheel**

IBM Cloud managed services

- Add ready to use features and functionality to application code
- Covers **AI**, **Internet of Things**, **Analytics**, **DevOps**, **Blockchain**, **Storage** and many more...
- Are provided by **IBM**, **Open-source communities** and **third-party partners**



**But the wheel is
customizable!**



IBM Watson services for AI

Speech



Text To Speech

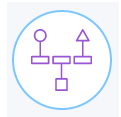


Speech To Text

Language



Language
Translator



Natural
Language
Classifier

Natural Language Classifier

Natural Language Classifier

Natural Language Classifier applies deep learning techniques to make predictions about the best predefined classes for short sentences or phrases.

[Get Started](#) [API Reference](#) [Documentation](#) [Fork on GitHub](#)

Start for free in IBM Cloud

By using this application, you agree to the [Terms of Use](#)

Ask a question about the weather

Watch the Natural Language Classifier categorize your weather-related question. In this demo, the classifier is trained to determine whether the question is related to [temperature](#) or [conditions](#). The output includes the top classification and a confidence score.

Enter a weather question or Try a sample question below *

Ask

* This system is for demonstration purposes only and is not intended to process Personal Data. No Personal Data is to be entered into this system as it may not have the necessary controls in place to meet the requirements of the General Data Protection Regulation (EU) 2016/679.

Sample questions

- Is it hot outside?
- What is the expected high for today?
Will it be foggy tomorrow morning?

The classifier often scores well with terms that it hasn't been trained on. In the sample questions, the words "sleet," or "foggy," are not part of the training data, yet the classifier correctly handles

Curl Go Java Node

The code examples on this tab use the client library that is

Installation

```
npm install ibm-watson
```

GitHub

<https://github.com/watson-developer-cloud/node-sdk>

SDK managing the IAM token. Replace `{apikey}` and `{url}`

```
const NaturalLanguageClassifierV1 = require('ibm-watson/language-classifier/v1');
```

```
const naturalLanguageClassifier = new NaturalLanguageClassifier({  
  iam_apikey: '{apikey}',  
  url: '{url}'  
});
```

Basic authentication. Replace `{username}`, `{password}`, and



weather about

All text (50)

My classes (2)

 Search classes



Select a .csv file to upload
or create an empty class
to add data to later.

Create a class

Is it windy?

Will it rain today?

What are the chances for rain?

Will we get snow?

conditions (26)

How hot is it today?

Is it hot outside?

Will it be uncomfortably hot?

Will it be sweltering?

temperature (24)

Ask a question about the weather

Watch the Natural Language Classifier categorize your weather-related question. In this demo, the classifier is trained to determine whether the question is related to `temperature` or `conditions`. The output includes the top classification and a confidence score.

Ask

Output

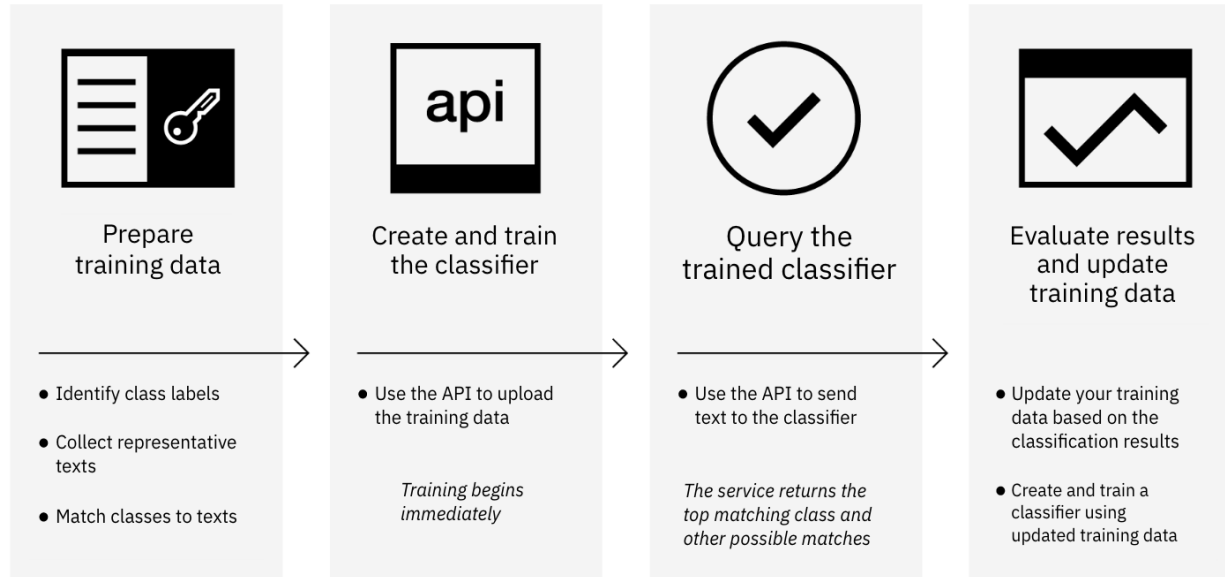
Results JSON

```
{
  "classifier_id": "004a12x110-nlc-3450",
  "url": "https://gateway.watsonplatform.net/natural-language-classifier/api/v1/classifiers/004a12x110-nlc-3450",
  "text": "is it foggy",
  "top_class": "conditions",
  "classes": [
    {
      "class_name": "conditions",
      "confidence": 0.9566176386476295
    },
    {
      "class_name": "temperature",
      "confidence": 0.04338236135237062
    }
  ]
}
```

How you use the service [↗](#)

The following image shows the process of creating and using the classifier:

Using the Natural Language Classifier service

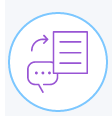


IBM Watson services for AI

Speech



Text To Speech

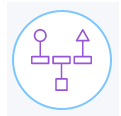


Speech To Text

Language



Language Translator



Natural Language Classifier

Empathy

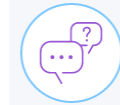


Tone Analyzer



Personality Insights

AI Assistant



Watson Assistant



Voice Agent

Vision



Visual Recognition

Watson Visual Recognition **identifies** objects and people.

hatchback
compact car
vehicle
claret red color



Watson Visual Recognition **categorizes** for easy organization.



vintage



modern

Watson Visual Recognition assesses for better problem-solving.



counterfeit, 78% confident

Watson Visual Recognition **recommends** for faster decision-making.



Historically, we've paid
\$7,500 for similar
types
of damage

Visual Recognition Features

General Model

Quickly understand the contents, scenes, and actions within an image.

Food Model

Recognize foods and meals with enhanced accuracy.

Explicit Model

Determine if an image contains inappropriate content.

Custom Model

Train Watson to understand and classify your own custom content.

Custom Object Detection

Identify, locate and count objects within images.

Pokemon

Associated Service : Visual Recognition-*ni*

Watson Visual Recognition training

My classes (3)

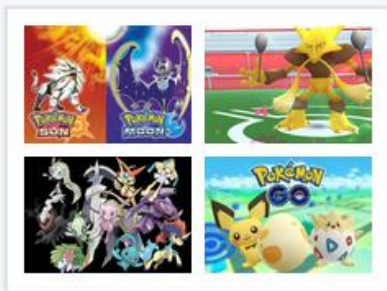
All images (1272)

Drag and drop files from your project.

3 classes | 0 incomplete classes | 0 unclassified images



Create a class

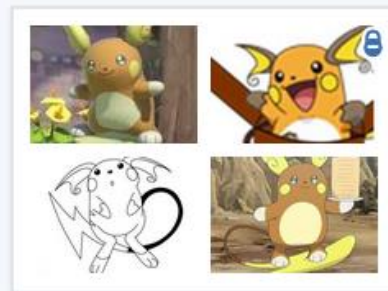


Negative (311)

This class is recommended but not required.



pikachu (483)



raichu (478)

Pokemon

Associated Service : Visual Recognition-nl

Overview

Test

Implementation

Filter

Threshold 0.0

0 1

Class

 pikachu raichu

Watson Visual Recognition testing

× Clear results

0002.jpg



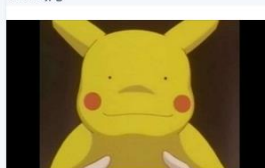
pikachu 0.89
raichu 0.01

0004.jpg



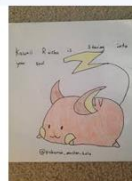
pikachu 0.89
raichu 0.05

0006.jpg



pikachu 0.91
raichu 0.00

0010.jpg



raichu 0.90
pikachu 0.01

0011.jpg



raichu 0.83
pikachu 0.30

0012.jpg



raichu
pikachu

0007.jpg



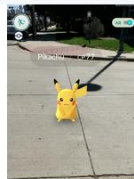
raichu 0.05
pikachu 0.03

0008.jpg



raichu 0.89
pikachu 0.00

0001.png



pikachu 0.90
raichu 0.01

0013.png



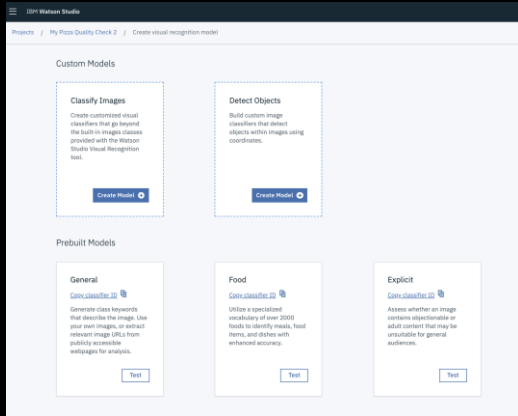
raichu 0.91
pikachu 0.00

0014.png



pikachu 0.01
raichu 0.00

Visual Recognition Tools



Watson Studio

Easily provision a Visual Recognition instance and interact with the service through your browser.

Classify images using IBM's pre-trained models or train and manage your own Custom Models.

IBM Watson Services for Core ML

Build apps that leverage Watson models on iOS devices, even when offline.

Export Custom Models for Core ML through Watson Studio. Core ML exports are free during our promotional period.



IBM Watson services for AI

Speech



Text To Speech

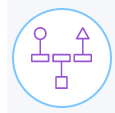


Speech To Text

Language



Language Translator



Natural Language Classifier

Empathy

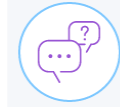


Tone Analyzer



Personality Insights

AI Assistant



Watson Assistant



Voice Agent

Vision

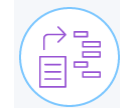


Visual Recognition

Knowledge



Discovery



Natural Language Understanding



Knowledge Studio

Data



Watson Studio



Watson Machine Learning



Knowledge Catalog

Start for free, Scale for free !

Welcome to

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<https://cloud.ibm.com>

Join the network

Access IBM Cloud for free

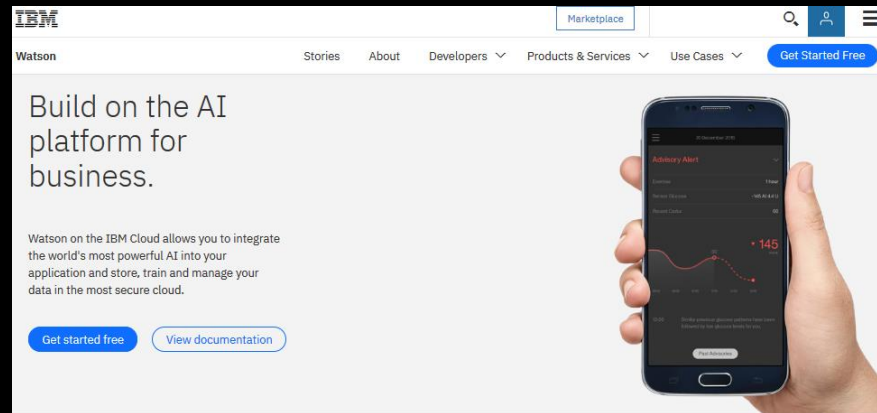
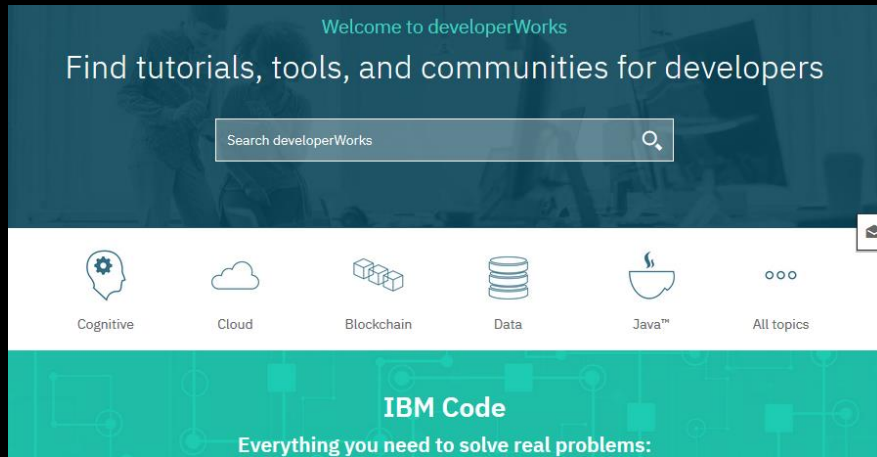
- Compute and storage infrastructure
- Open source platform services and containers
- Software services and tools from IBM, Watson, and more

Join the developerWorks

Starter Kits to build your app with code examples that combine multiple services for common use cases.

Connect with the Watson Developer Community

where you can engage the experts for answers and visit our tutorials.



Access to IBM's resources on emerging and critical technologies

IBM Academic Program

ibm.biz/academic

IBM Startup Program

<https://developer.ibm.com/startups/>

Key points:

- Focus on ideas not on Infrastructure
- Less experts needed
- Go to Market rapidly
- Flexibility of choice
- Continuous integration
- Useful APIs
- Join the ecosystem

Other IBM sessions:

Day 2 at 9:30 Room 5 : Deep Dive Visual Recognition Workshop with Watson
by Clémence Lebrun, IBM

Day 2 at 12:00 Room 4 : A brief history of Cloud – A container story
by Franck Descollonges, IBM

Day 2 at 10:15 Room 1 : Multinationals fostering the growth of the tech startups and the challenges of nowadays world
by Pascale Xélot, IBM