

Fun with APIs: The Big Bang Theory



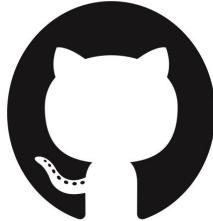
Uli Hitzel
Developer Advocate
Axway



Developer Advocate



/in/uhitzel



/u1i/slides



IBM



Y!





cosmicrenaissance

1,257 posts

194 followers

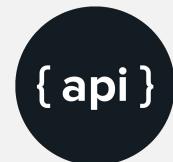
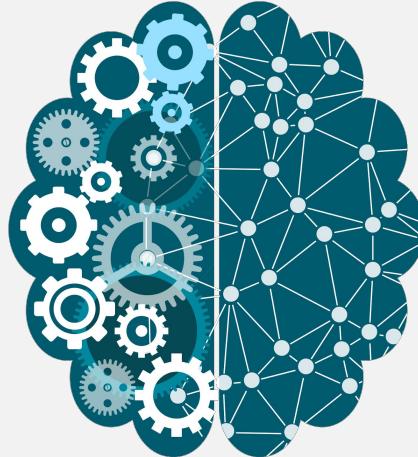
615 following

Just some guy, really.

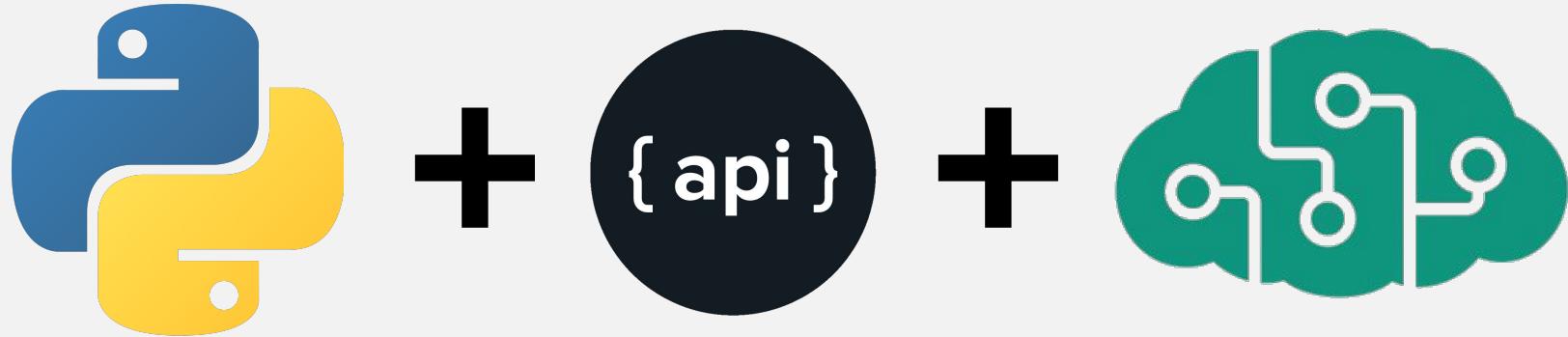
+65

City life, scenery, food.

Camera: Samsung Galaxy S7/S9

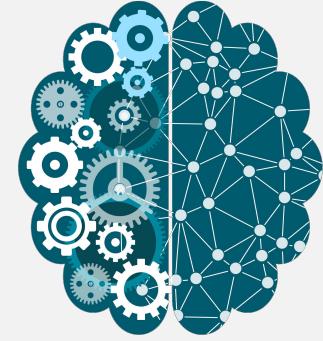


A word cloud visualization showing various nouns and adjectives in different colors (blue, green, orange, red) against a black background. The words are arranged in a grid-like pattern. Three specific words are highlighted with green circles: **bench**, **view**, and **plate**. The word **bench** is surrounded by **wine**, **desk**, **crowd**, **piece**, and **skiing**. The word **view** is surrounded by **light**, **young**, **meal**, **tree**, and **computer**. The word **plate** is surrounded by **food**, **pan**, **pizza**, **crowded**, **lith**, **hill**, **cream**, **stone**, **luggage**, **park**, **living**, **banana**, and **horse**.



Microsoft

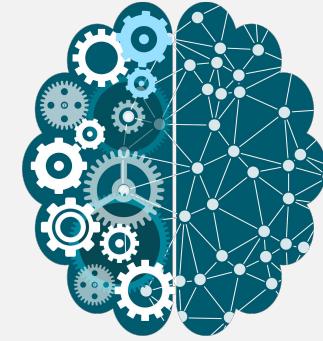
Cognitive Services



Text: "a close up of a pizza"

Confidence: 0.9246481371443355

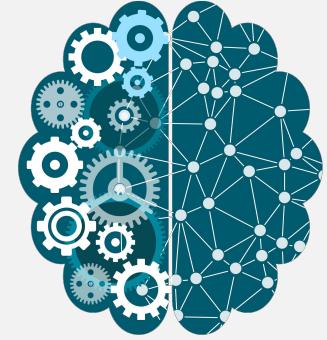
Tags: "pizza" "food" "table" "sitting" "cheese" "plate" "top" "piece" "slice" "toppings" "close" "eaten" "sauce" "covered" "wooden" "large" "pepperoni" "white" "pan"



Text: "a cup of coffee"

Confidence: 0.8527612488821656

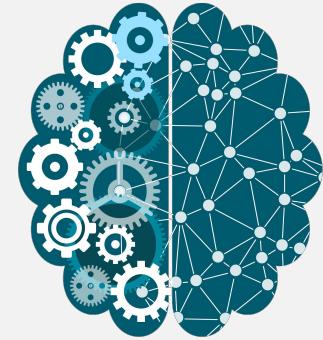
Tags: "cup" "table" "coffee" "food" "sitting" "drink" "plate" "sandwich" "breakfast"
"spoon" "glass" "close" "donut" "hot" "white" "phone" "soup"



Text: "a wooden table next to a window"

Confidence: 0.8365439206950018

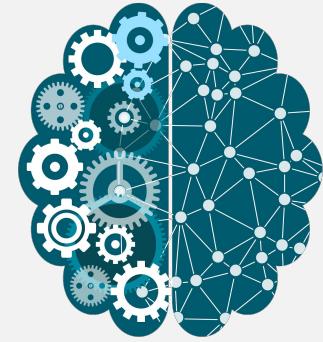
Tags: "table" "indoor" "window" "room" "sitting" "chair" "small" "desk" "wooden" "laptop" "lit" "top" "light" "counter" "computer" "living" "kitchen"



Text: "a sunset over the ocean"

Confidence: 0.8065587199349568

Tags: "outdoor" "water" "beach" "sunset" "ocean" "sun" "man" "pier" "track"
"board" "top" "large" "red" "standing" "surfing" "walking" "boat" "holding" "flying"



Text: "a bunch of bananas"

Confidence: 0.37608016747604295

Tags: "animal" "covered" "sitting" "old" "side" "large" "water" "lot" "many" "top"
"table" "bunch" "street" "fire" "bird" "snow" "parking" "group" "river" "ocean" "field"

Key Points

- 1 – APIs allow you to innovate super fast!
- 2 – Focus on Use Cases
- 3 – Get out of the Basement!



<http://apigeek.net>

ISS Tracker

Tracking the International Space station over the course of one day and visualizing the flight path on a Google Earth like globe

[ISS Map](#)

[Code on Github](#)

Big Bang Theory Opening Sequence

Computer Vision AI looking at every single frame and tells us what it sees

[All Frames & Results](#)

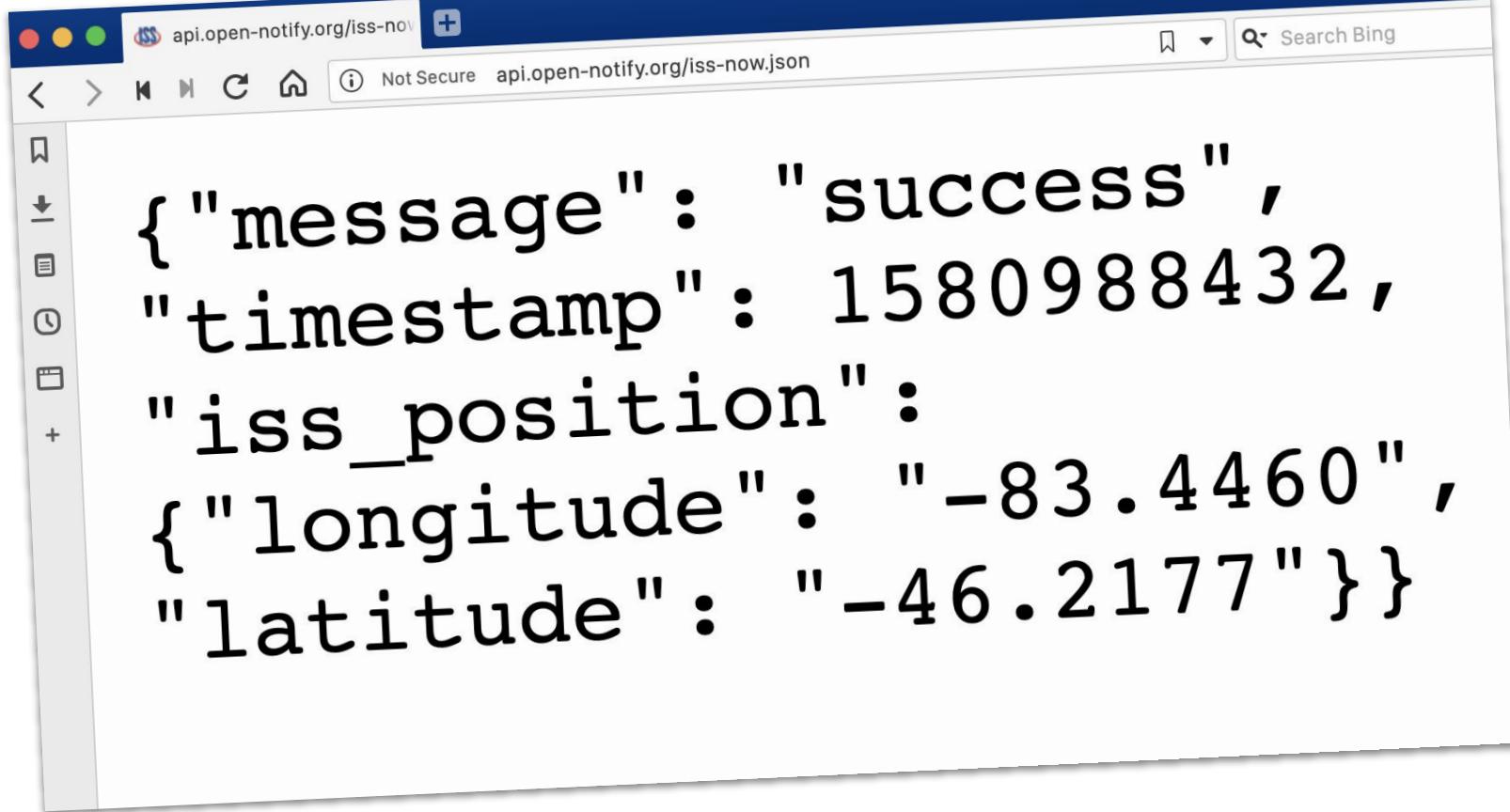
LTA Buses Singapore

Google Maps visualization of Singapore's busy buses.

[Code & Maps](#)

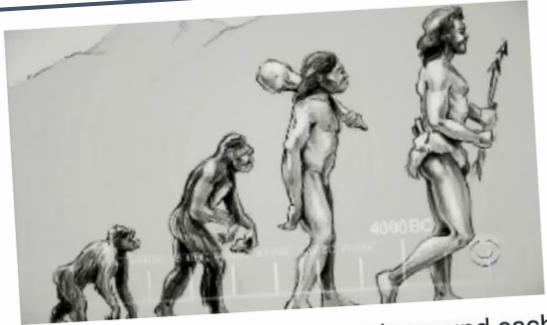
[LinkedIn Article](#)





A screenshot of a web browser window displaying a JSON response. The browser has a dark blue header bar with a red, yellow, and green window control buttons on the left. The address bar shows the URL `api.open-notify.org/iss-now.json` with a "Not Secure" warning icon. To the right of the address bar is a search bar with the placeholder "Search Bing". Below the header is a toolbar with standard browser icons: back, forward, refresh, and home. On the far left, there is a vertical sidebar with various icons: a bookmark, a download arrow, a document, a clock, a calendar, and a plus sign. The main content area contains the following JSON data:

```
{ "message": "success", "timestamp": 1580988432, "iss_position": { "longitude": "-83.4460", "latitude": "-46.2177" }}
```



Description: "a group of people around each other"

Tags: "drawing", "group", "woman", "man", "young", "white", "people", "player"

Confidence: 51 %



Description: "a group of people riding skis on a snowy hill"

Tags: "outdoor", "skiing", "man", "photo", "people", "group", "field", "black", "riding", "white", "playing", "air"

Confidence: 38 %







APIS.

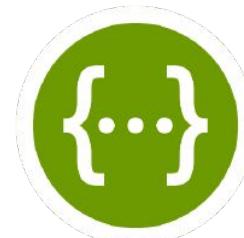


- Glue all kinds of services & data together
 - HTTP/REST
 - JSON
 - Swagger



Design First

- What can I do?
- What do I get?
- Data Models
- Authentication
- License



```
1 swagger: "2.0"
2   info:
3     description: "This is a sample server for Swagger. Find out more about Swagger at [http://swagger.io] or on [irc.freenode.net, #swagger]. Within this sample, you can use the api key authorization filters."
4   version: "1.0.0"
5   title: "Swagger Petstore"
6   termsOfService: "http://swagger.io/terms/"
7   contact:
8     email: "apiteam@swagger.io"
9   license:
10    name: "Apache 2.0"
11    url: "http://www.apache.org/licenses/LICENSE-2.0.html"
12 host: "petstore.swagger.io"
13 basePath: "/v2"
14 tags:
15  - name: "pet"
16    description: "Everything about your pet"
17    externalDocs:
18      description: "Find out more"
19      url: "http://swagger.io"
20  - name: "store"
21    description: "Access to Petstore operations"
22  - name: "user"
23    description: "Operations about users"
24    externalDocs:
25      description: "Find out more about users"
26      url: "http://swagger.io"
```

Divide & Conquer

2

Use

- API Portal
- Swagger/OAS
- API Keys
- OAuth
- HTTP
- JSON
- Sandbox

Manage

- Access Control
- Security
- Quotas
- Transformation
- Service Catalog
- Self Service
- Analytics

Build

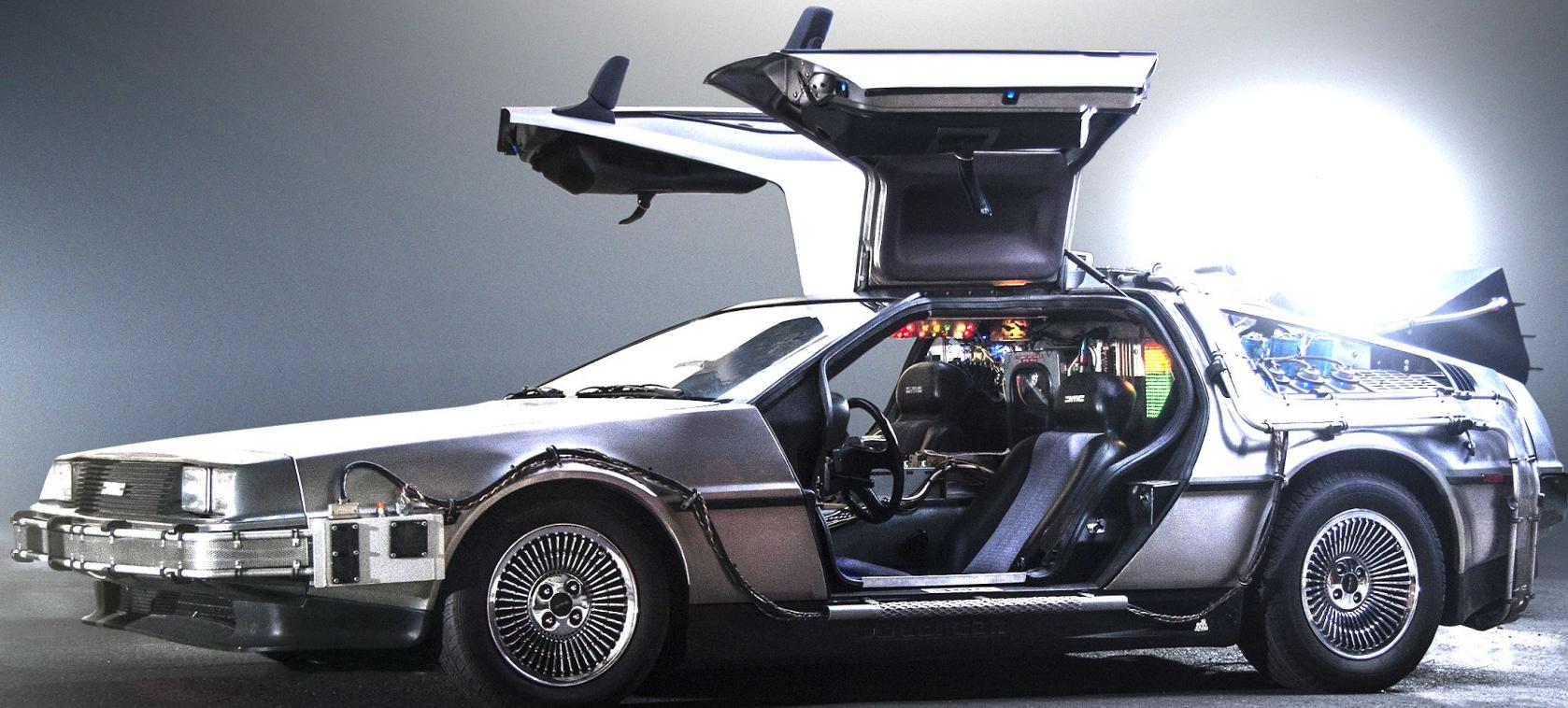


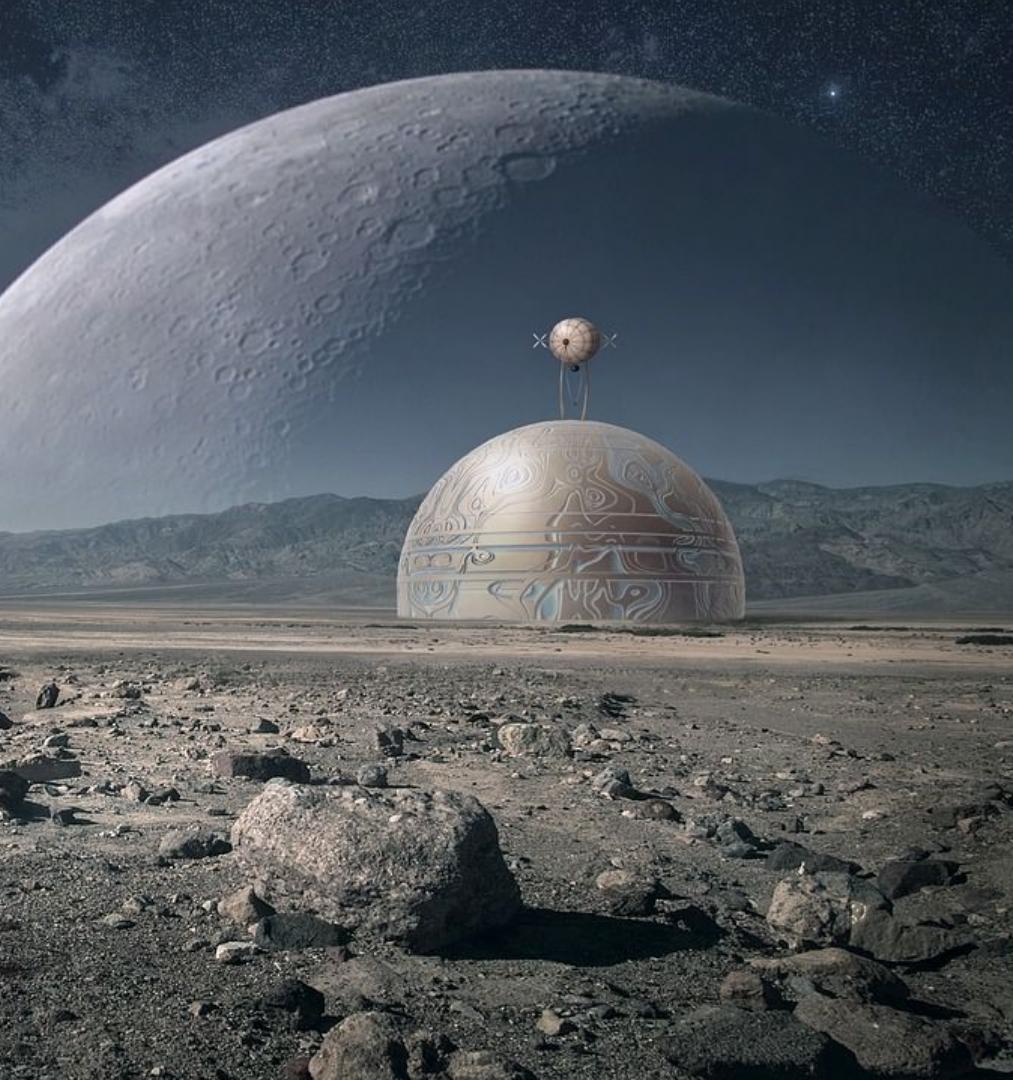
A photograph of a light blue plastic bucket with a red handle, sitting in a sandy area. The bucket appears to be partially filled with sand. It is positioned on the left side of the slide.

3

Developer Experience

- Add all the ‘Lego Pieces’ to an API Portal
- Instant Discovery & Sandbox
- ‘Hello World’ in 30 minutes
- Innovation





Kubernetes
Microservices
Kafka
Elastic
Zookeeper
MongoDB



A business and IT virtual series

APIs on the edge: gateways & service mesh

May 5 - 8AM PDT/5PM CEST



Next week Wednesday
10 pm Jakarta

<https://bit.ly/uliwebinar1>



John Wiese

Principal Solutions Architect
Axway



Mihir Mone

Principal Pre-Sales Consultant
Axway

'Hello World' in 30 Minutes

- Rapid Innovation
- Focus on Use Cases
- Collaborate with the Business



Over To You!

- **Try it out:** Build something fun with APIs!
- **Don't reinvent:** Reuse stuff that's already there & great
- **Join & Share:** Participate at Meetups & Get Involved



/u1i

