

**stripe**

DevX Singapore



Uli Hitzel  
API Evangelist  
Axway

APIs for Humans | March 2019

7:00 - 7:30 PM

## **APIs for Humans**

Uli Hitzel

7:30 - 8:00 PM

## **AR for Everyone**

Thinh Le

8:00 - 8:30 PM

## **Modelling Marketplaces with GraphQL**

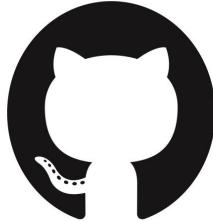
Thorsten Schaeff



# Developer Advocate



/in/uhitzel



/u1i/slides



IBM



Y!





## cosmicrenaissance

1,257 posts

194 followers

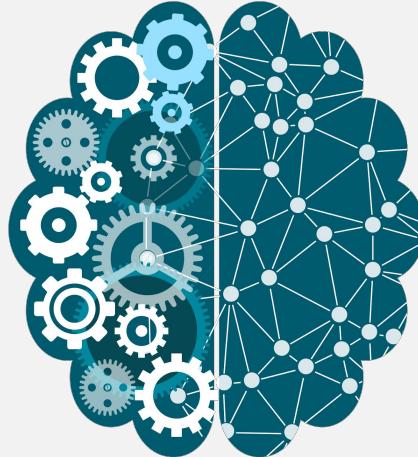
615 following

Just some guy, really.

+65

City life, scenery, food.

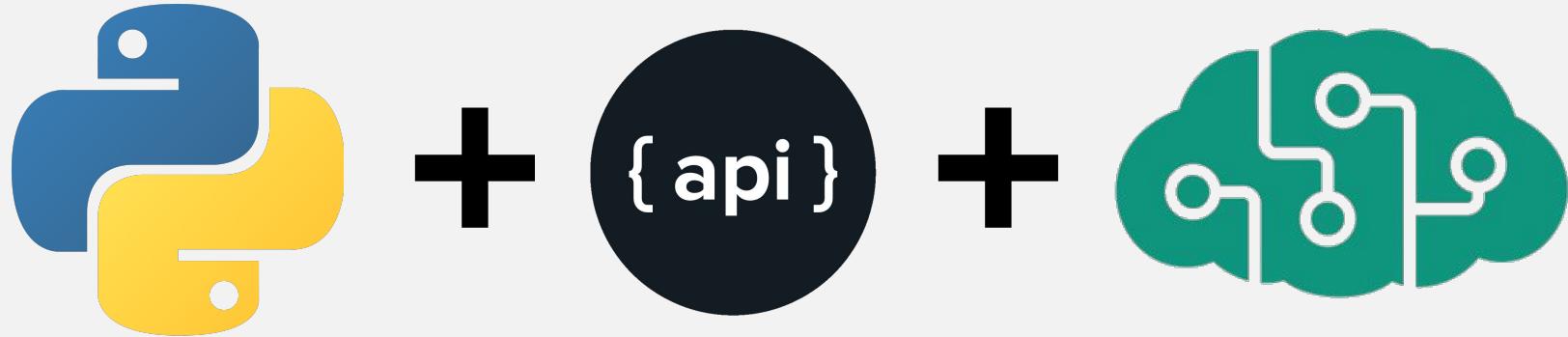
Camera: Samsung Galaxy S7/S9



clock outdoor person  
furniture docked bunch paper ship sun  
counter different dish mountain bed  
sauce tray pier slope  
yellow cup stop  
donut sidewalk surfing harbor  
glass kite brown airplane laying display  
garden wooden eaten side food indoor chair track  
riding hydrant meat drink  
tree sunset double flower car house  
train close indoor food dirt  
half traffic slice fries lot  
brick door beach broccoli fork  
cheese window orange traveling  
colorful clouds nature  
street city  
tower body  
overlooking plane  
flying pole  
ground church  
flying flying  
decorated plane  
outdoor grass forest  
room living hanging  
coffee  
water

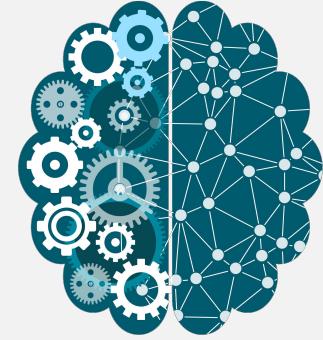
plate wine desk bench view  
food crowd piece light  
skiing toppings young  
pan meal bun computer  
tree night glasses  
luggage eating bird  
park driving cloudy  
living banana horse

old cake fence area road  
area cut  
topped animal snow board kitchen  
dock black air statue  
phone station grass soup grazing rice  
restaurant bridge store  
sand road street



Microsoft

Cognitive Services



**Text:** "a close up of a pizza"

**Confidence:** 0.9246481371443355

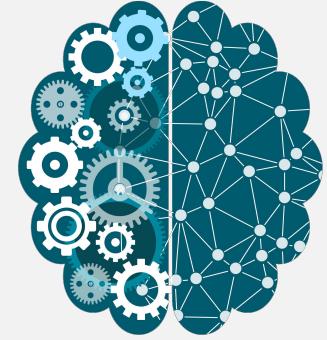
**Tags:** "pizza" "food" "table" "sitting" "cheese" "plate" "top" "piece" "slice" "toppings" "close" "eaten" "sauce" "covered" "wooden" "large" "pepperoni" "white" "pan"



**Text:** "a cup of coffee"

**Confidence:** 0.8527612488821656

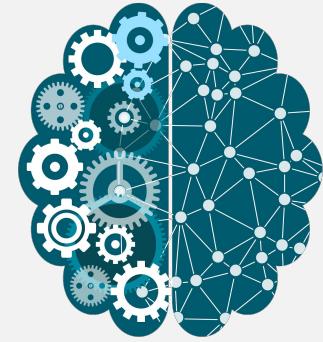
**Tags:** "cup" "table" "coffee" "food" "sitting" "drink" "plate" "sandwich" "breakfast"  
"spoon" "glass" "close" "donut" "hot" "white" "phone" "soup"



**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"

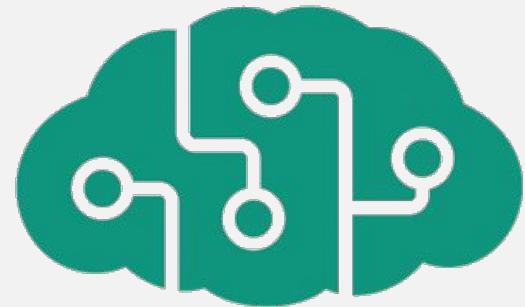
# Key Points

- 1 – Build APIs:  
Design First, Code Later
  
- 2 – Manage APIs:  
Divide & Conquer
  
- 3 – API Adoption: Developer  
Experience is Everything



# You've just seen an example of this

- API abstracts something really complex
- Quick Results
- Easy to use → More Users → More Sample Data → AI learns → Better Product



 Microsoft  
Cognitive Services



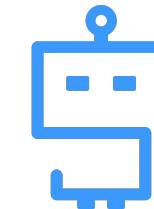
# Design First

- Start with the Interface
- Use API Design Guides
- Quick Prototyping & Mocking

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

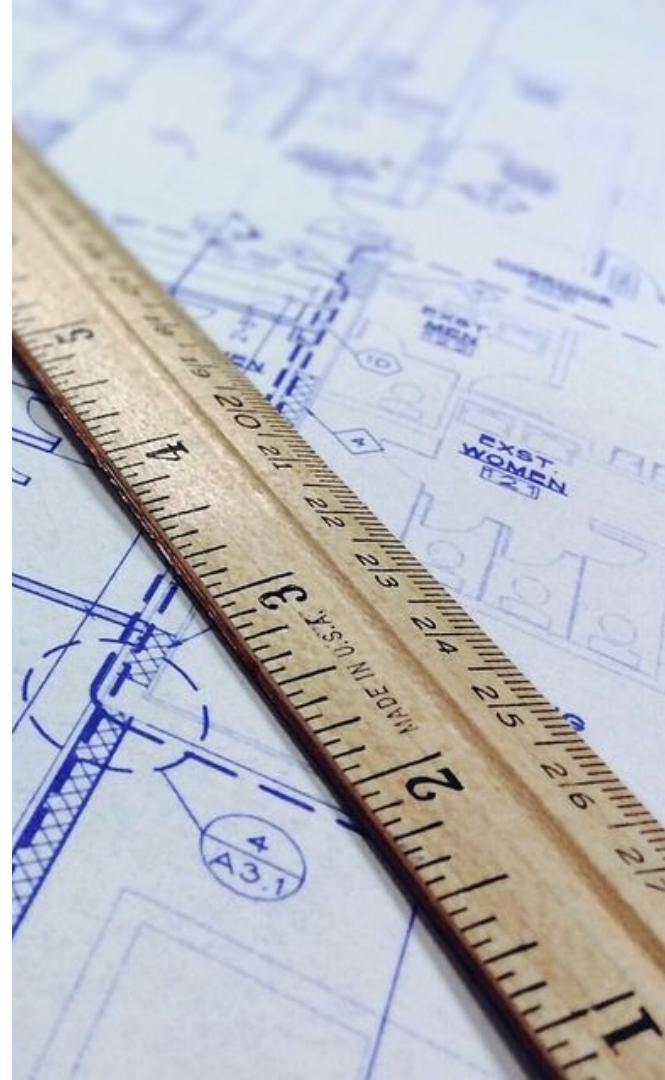
# Contract First

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



# Be Strict about This

<b>C</b> <b>R</b> <b>U</b> <b>D</b>	<b>E</b> <b>E</b> <b>P</b> <b>E</b>	<b>A</b> <b>T</b> <b>U</b> <b>L</b>	<b>E</b> <b>R</b> <b>U</b> <b>E</b>	<b>ATE</b> <b>AD</b> <b>DATE</b> <b>ELATE</b>
CREATE	READ	UPDATE	DELETE	
HTTP POST /resource + Payload 201 + Location	HTTP GET /resource 200 + Payload	HTTP PUT /resource/{id} + Payload 200/204	HTTP DELETE /resource/{id} 200/204	



# Use & Share Design Guidelines

The API Guidelines are split into two main parts:

- General Guidelines
- API type-specific Guidelines
  - REST APIs Guidelines
  - Kafka Guidelines

The general guidelines section discusses the core principles relevant to any kind of API. The API type-specific section further defines the guidelines specific to a given architectural style or API technique (such as REST, Kafka or GraphQL APIs).

### How to read the Guidelines

These Guidelines are available for online reading at [GitBook](#) its source can be found on [GitHub](#).

The CAPITALIZED words throughout these guidelines have a special meaning:

- 1 The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT",
- 2 "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in
- 3 this document are to be interpreted as described in RFC2119.



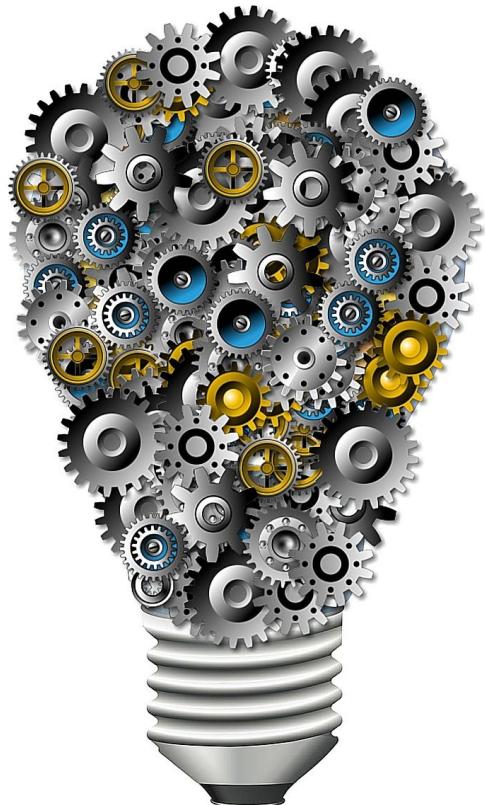
apistylebook.com



# Iterations

Clean API Specs

- Generate Docu + SDK
- Mock with 'Semantics'
- Test
- Refine & Repeat



# Divide & Conquer

- Do you really need to code?
- Centralized Governance  
and Unified Experience
- API Management as  
Control Plane

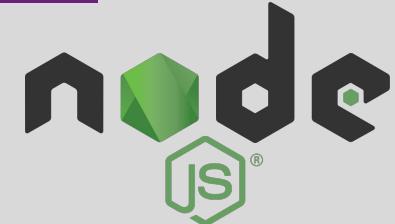
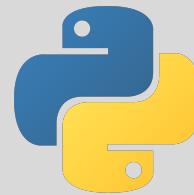
# Use

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

# Manage

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

# Build





# Developer Experience

- Who is your Customer?
- Give them Quick Results
- Involve them

3



# Products made by Fans

Can you think like a developer, if you're not a developer yourself?

# 'Hello World' in 30 Minutes

- Instant Access
- Sandbox
- Examples, Tutorials & 'Flavored' Documentation



# Involve & Empower your Audience

- Git powered Documentation  
→ Pull Requests
- API Portal as your Developer Community
- Meetups, Success Engineers
- Developer Experience → Building Relationships



# Takeaways

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Divide & Conquer
- 3 – API Adoption: Developer  
Experience is Everything



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