

Study



# Cloud Study Jam

## GDG Bangalore

16th February 2019



# Who am I?



**Arjun Rao**

**NLP Engineer at Stride.ai**

Former Intern for Google Cloud DevRel at Google, SF

LinkedIn/Twitter: arjunra0

[github.com/arjun-rao/talks/](https://github.com/arjun-rao/talks/)

# Agenda:

Welcome!

Get free access to Qwiklabs

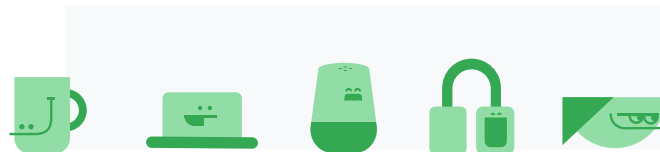
Lab 1: Extract, Analyze, and Translate Text  
from Images with the Cloud ML APIs

Lab 2: Awwvision: Cloud Vision API from a  
Kubernetes Cluster

Lab 3: CloudML Engine Qwik Start

Lunch Break

Bonus Lab



# Why QwikLabs?



Free access to Qwiklabs hands-on labs, a \$55+ value



Earn Google Cloud [badges](#) to show your skills and expertise



No need to register with a credit card

Study



# Lab 1: Extract, Analyze, and Translate Text from Images with the Cloud ML APIs



# Shell Commands

<https://goo.gl/HoJi19>



# Lab1 Script

```
from google.cloud import vision
from google.cloud.vision import types
from google.cloud import translate

client = vision.ImageAnnotatorClient()
image = vision.types.Image()
# image.source.image_uri = 'gs://cloud-vision-codelab/otter_crossing.jpg'
image.source.image_uri = 'gs://img-blr2/french-poem-1.jpg'
resp = client.text_detection(image=image)
print('\n'.join([d.description for d in resp.text_annotations]))

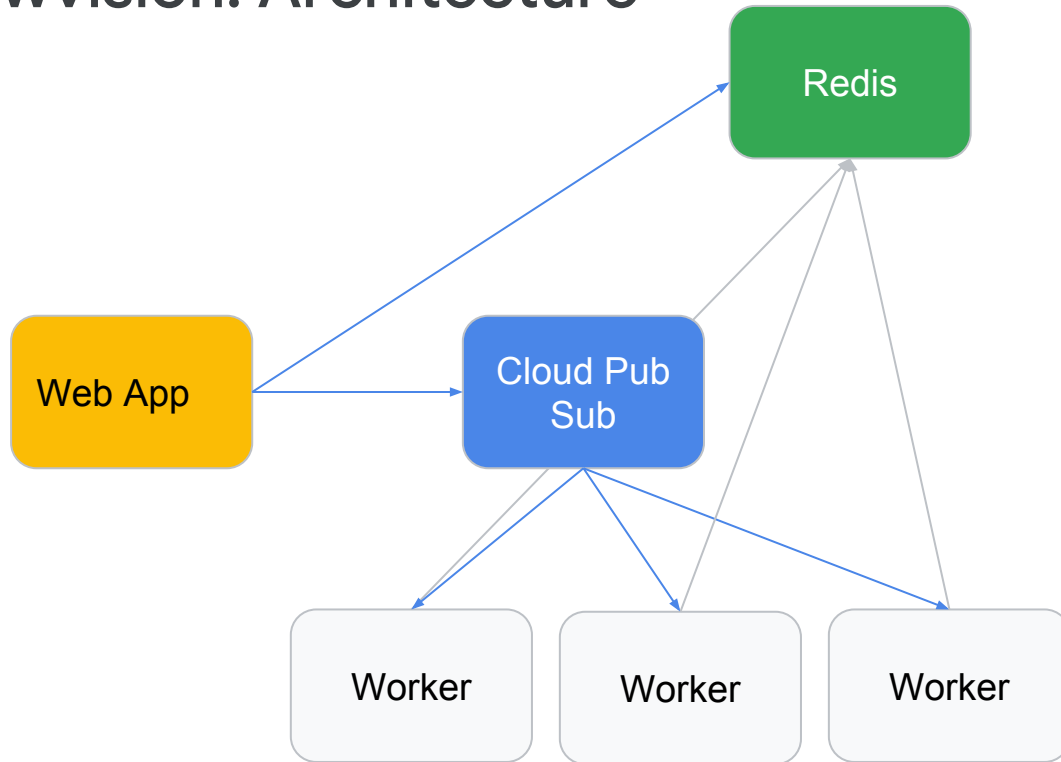
client2 = translate.Client(target_language='en')
for item in resp.text_annotations:
    result = client2.translate(item.description)
    print(result['translatedText'])
```

# Lab 2: Awwvision: Cloud Vision API from a Kubernetes Cluster





# Awwvision: Architecture



# Kubernetes: What is it?

Kubernetes is an open source container orchestration engine for automating deployment, scaling, and management of containerized applications.

## Container: What is it?

Kubernetes is an open source **container** orchestration engine for automating deployment, scaling, and management of **containerized** applications.

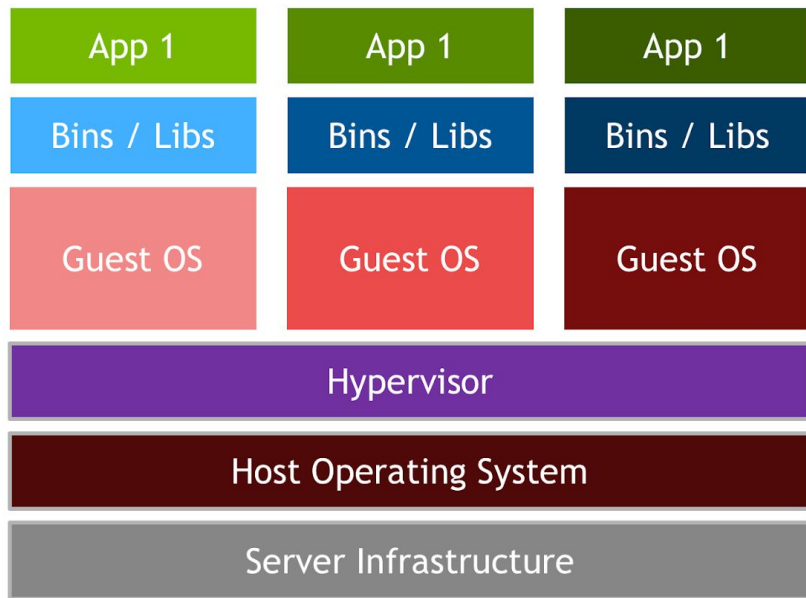
A **container** is a standard unit of software that packages up code and all its dependencies so the application runs quickly and reliably from one computing environment to another.

# Docker: What is it?

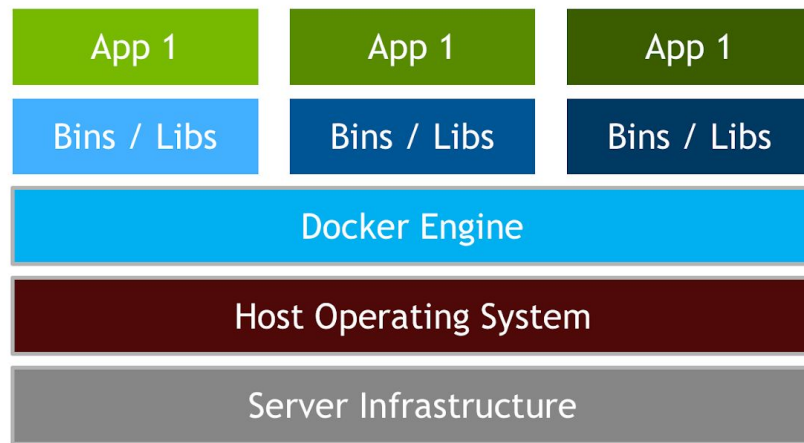
Kubernetes is an open source **container** orchestration engine for automating deployment, scaling, and management of **containerized** applications.

**Docker** is a tool **designed** to make it easier to create, deploy, **and** run applications by using **containers**. **Containers** allow a developer to package up an application with all of the parts it needs, such as libraries **and** other dependencies, **and** ship it all out as one package.

# Docker: What is it?

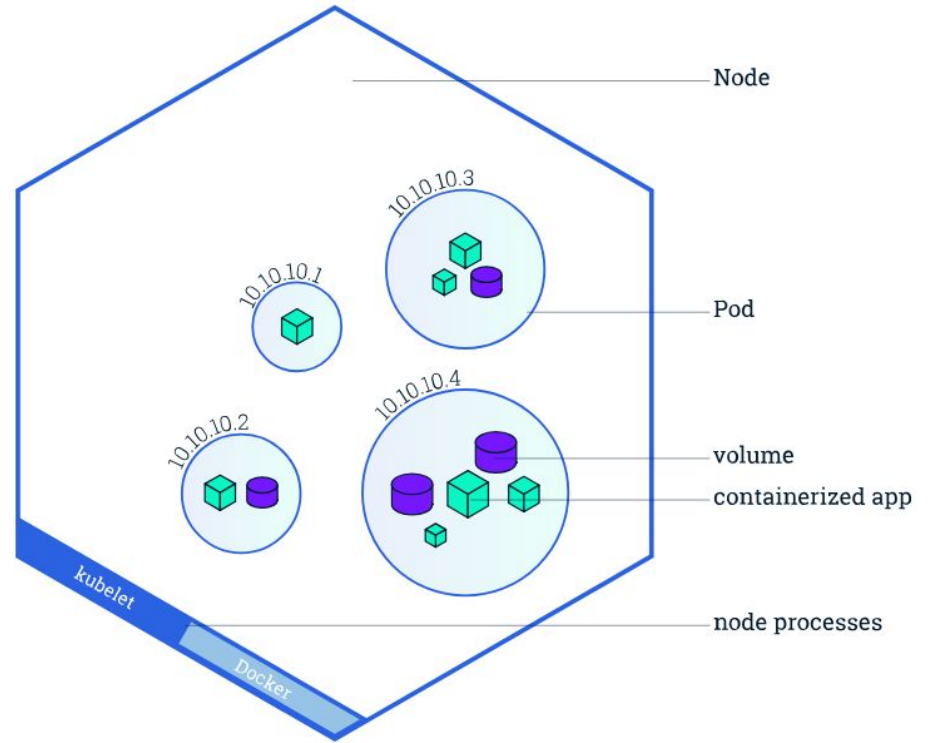


VIRTUAL MACHINES

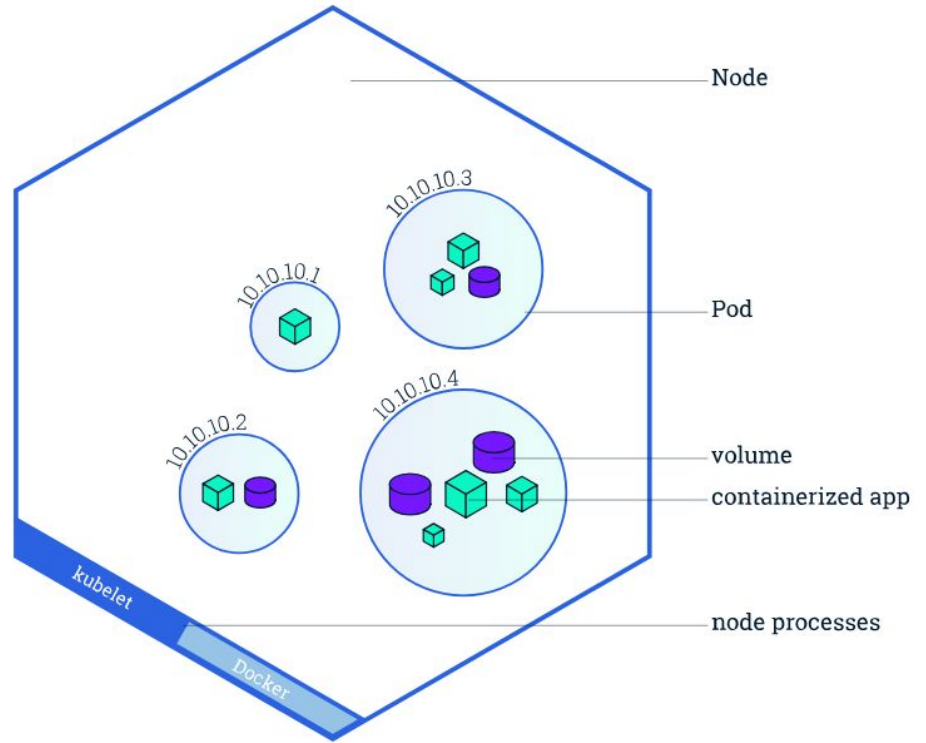


CONTAINERS

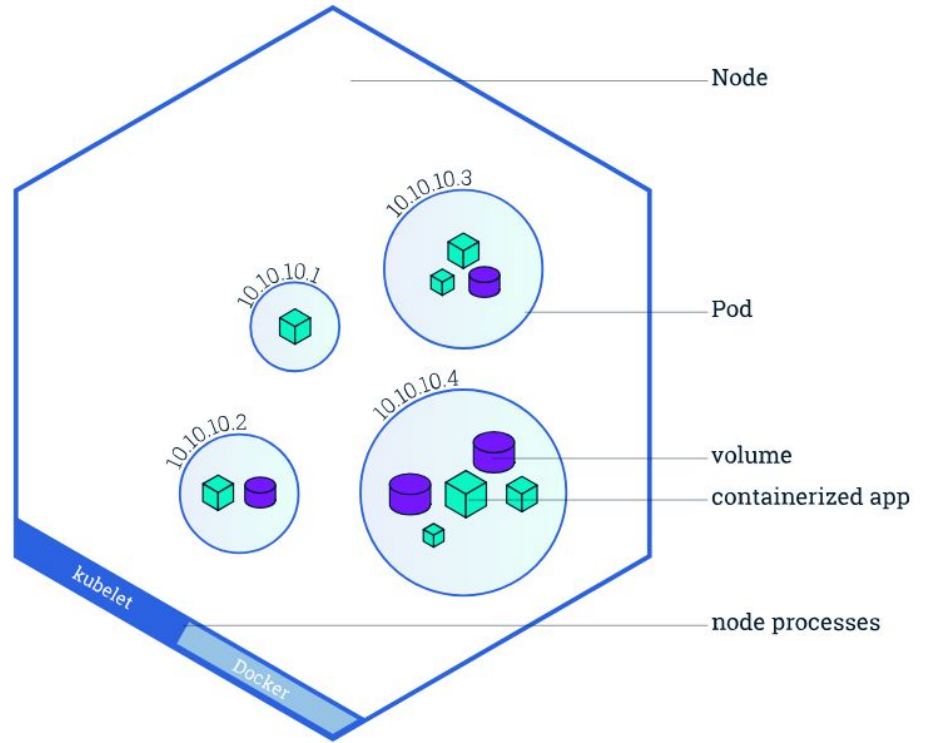
# Kubernetes: 101



# Kubernetes: Node

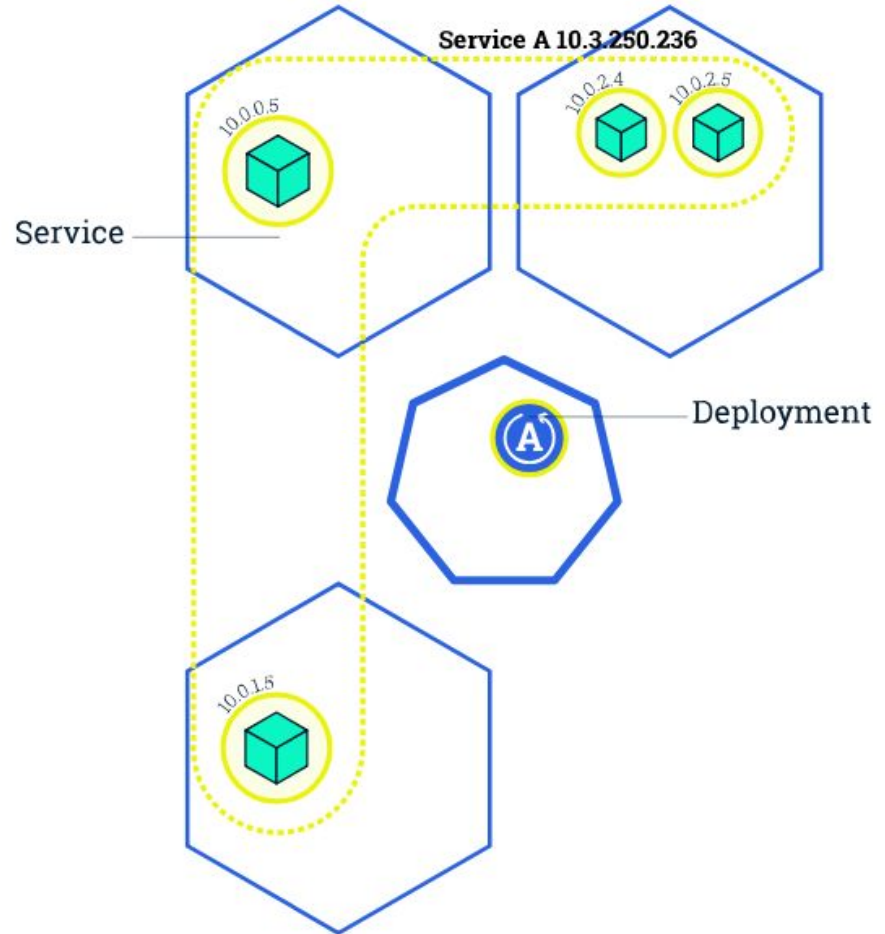


# Kubernetes: Pod





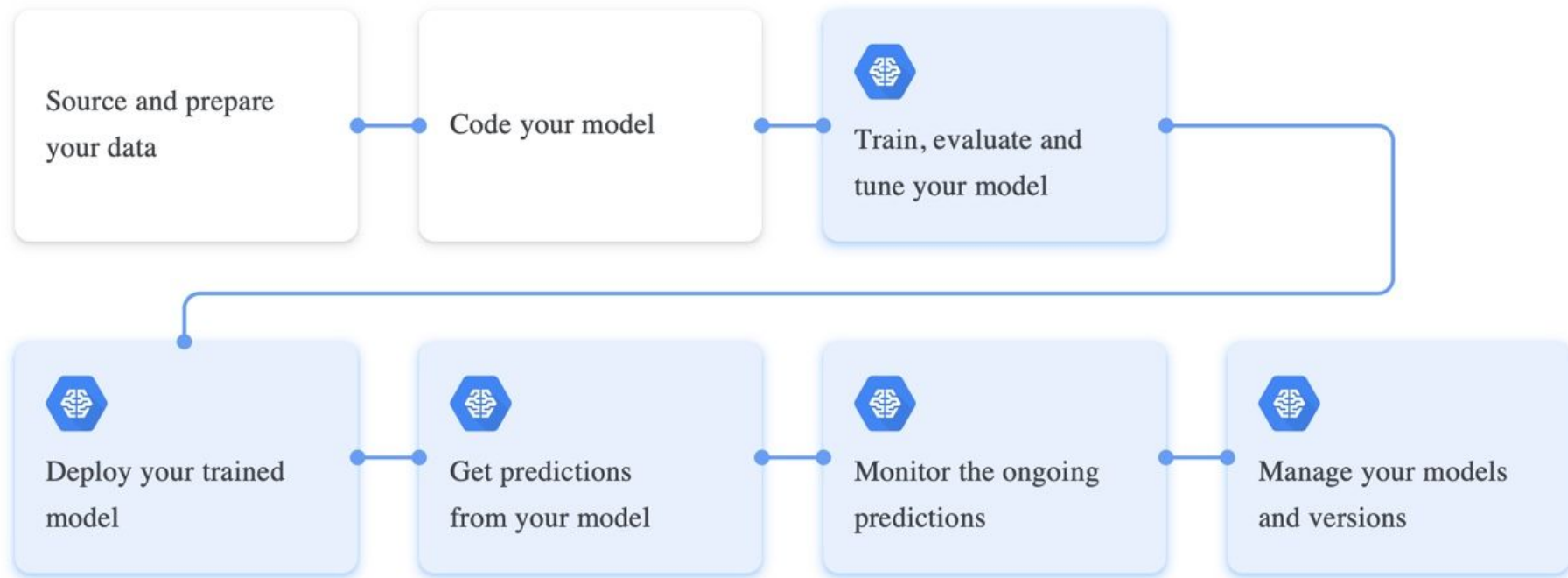
# Kubernetes: Service



# Lab 3: CloudML Engine Qwik Start



# CloudML Engine



## Contact Me:

LinkedIn/Twitter: arjunra0

## Source Code, Slides, etc:

goo.gl/cRuHXy

[github.com/arjun-rao/talks/](https://github.com/arjun-rao/talks/)

## Study



# That's a wrap.

