

Proyecto CGR-GIZ-CENFOTEC

IA – Modelo y Estimación de implementación

Msc. Rodrigo Herrera

Objetivo

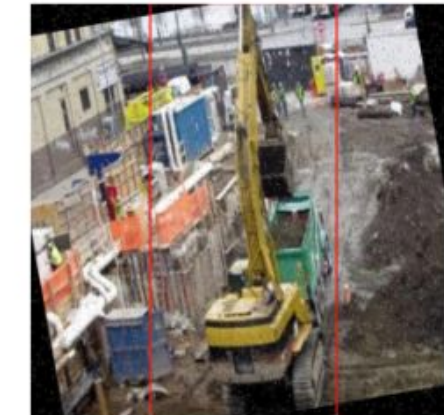
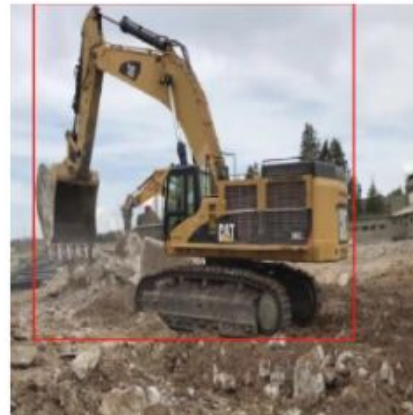
- Avances del Modelo
- Demo
- Revisión de arquitectura de implementación
- Revisión de costos de arquitectura

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Imágenes



Vagonetas



Excavadoras

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Imágenes



Cargadores



Personas

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Imágenes



Mezcladoras

Cantidad por clase son:

- Dump_truck: 7855
- Excavator: 7323
- Loader: 4870
- Mixer_truck: 1992
- Person: 2192

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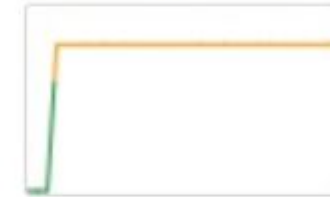
Modelos y proceso de entrenamiento

```
Epoch #0 loss: 0.08119627088308334  
Epoch #1 loss: 0.049133557826280594  
Epoch #2 loss: 0.053207721561193466  
Epoch #3 loss: 0.06533277779817581  
Epoch #4 loss: 0.02320614829659462  
Epoch #5 loss: 0.041896190494298935  
Epoch #6 loss: 0.027884017676115036  
Epoch #7 loss: 0.033624108880758286  
Epoch #8 loss: 0.009445509873330593  
Epoch #9 lossS: 0.043928906321525574
```

System RAM
17.4 / 83.5 GB



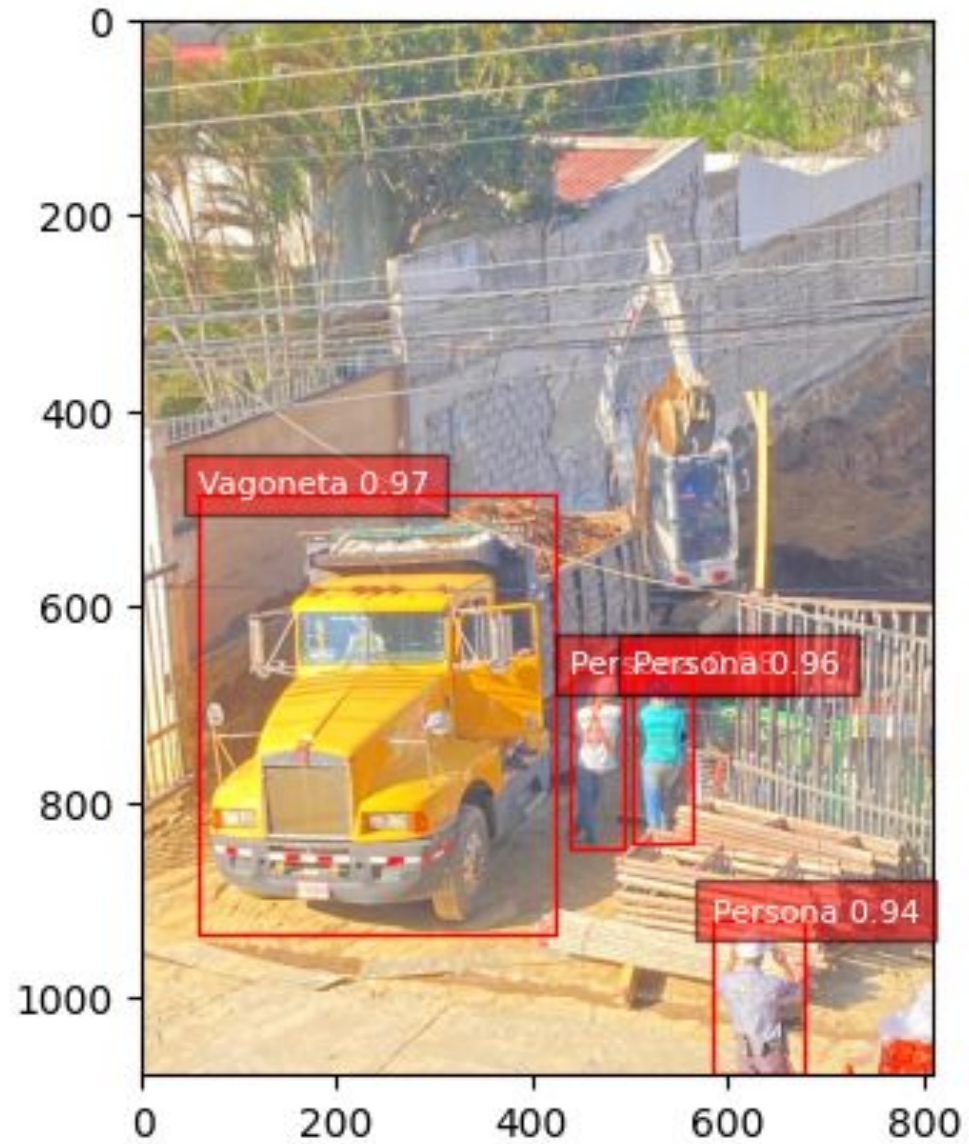
GPU RAM
31.8 / 40.0 GB



Disk
32.5 / 201.2 GB

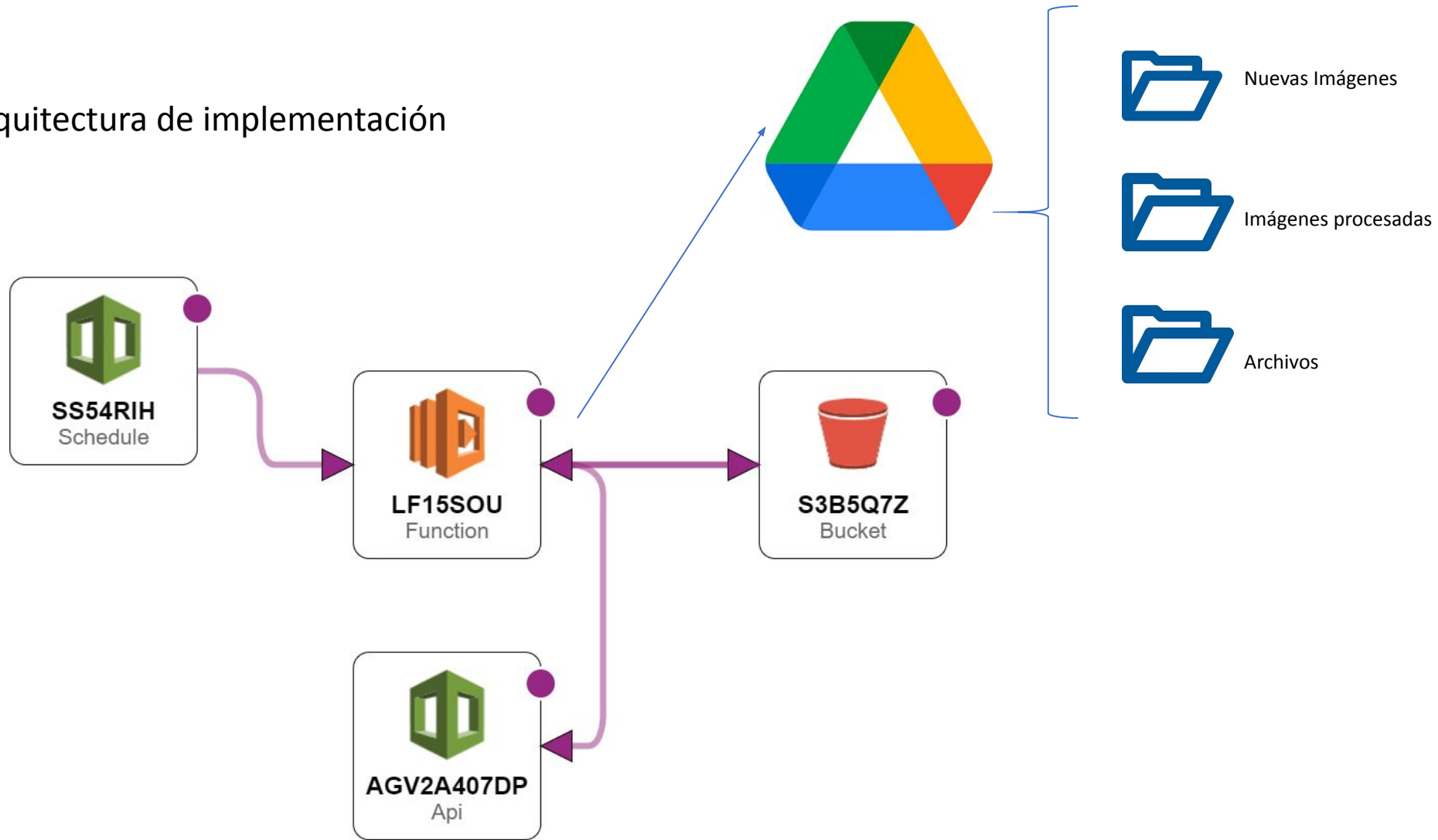


Demo



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Arquitectura de implementación



Estimación de Costos

Estimate summary

Upfront cost

0.03 USD

Monthly cost

124.99 USD

Total 12 months cost

1,499.91 USD

Includes upfront cost

Detailed Estimate

| Name | Group | Region | Upfront cost | Monthly cost |
|---|------------------|----------------|--------------|--------------|
| AWS Lambda | No group applied | US East (Ohio) | 0.00 USD | 0.01 USD |
| Status: - | | | | |
| Description: | | | | |
| Config summary: Architecture (x86), Architecture (x86), Invoke Mode (Buffered), Amount of ephemeral storage allocated (2 GB), Number of requests (1000 per day) | | | | |
| Amazon Simple Storage Service (S3) | No group applied | US East (Ohio) | 0.03 USD | 3.31 USD |
| Status: - | | | | |
| Description: | | | | |
| Config summary: S3 Standard storage (100 GB per month), S3 Standard Average Object Size (16 MB), PUT, COPY, POST, LIST requests to S3 Standard (1000), GET, SELECT, and all other requests from S3 Standard (1000), Data returned by S3 Select (2 GB per month), Data scanned by S3 Select (2 GB per month) DT Inbound: Internet (50 GB per month), DT Outbound: All other regions (50 GB per month) | | | | |

| Name | Group | Region | Upfront cost | Monthly cost |
|--|------------------|----------------|--------------|--------------|
| Amazon API Gateway | No group applied | US East (Ohio) | 0.00 USD | 121.67 USD |
| Status: - | | | | |
| Description: | | | | |
| Config summary: REST API request units (thousands), Cache memory size (GB) (None), WebSocket message units (thousands), HTTP API requests units (thousands), Average size of each request (2 MB), Average message size (32 KB), Requests (1000 per day), Requests (0 per day) | | | | |

Quotas

| | | |
|---------|-------------------------|--------|
| Queries | Per 60 seconds | 12,000 |
| | Per 60 seconds per user | 12,000 |

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