Google Compute Engine (GCE) Instructions

Setup:

- 1. VERY IMPORTANT ALWAYS STOP YOUR INSTANCES AFTER USAGE! Never leave them on without running something.
- Send an email to your supervisor stating that you need a GCE account, including <unique_name_of_your_final_project> and all <gmail> addresses of the group members.
- 3. Login with your gmail account and go to https://console.cloud.google.com/
- 4. You should now be able to see a project on the top left with <unique_name_of_your_final_project>, if not repeat Step 2.
- 5. One student in the group activates a 25 \$ <u>coupon</u> that serves as billing account
- 6. Change the billing account of the project to "Billing Account for Education". <u>https://cloud.google.com/billing/docs/how-to/modify-project</u>
- When you finish using the coupon of your last team member (~10 \$ remaining), activate a new <u>coupon</u>.

Computing:

8. Click "Go to Compute Engine".

🛉 Home–CropAware PS–G 🗙	+			~ _ @ ×
\leftrightarrow \rightarrow C \cong console.cloud.g	oogle.com/home/dashboard?project=cropaware-ps&cloudshell=false&su	portedpurview=project	> ☆	🙂 🖾 😄 🖷 🗯 🖬 📵 🗄
🔢 Apps 💧 Recent - Googl	M Summer Rese 🜔 I'm getting a 🚽 Artificial Intell 🔤	Cartpole-Intr 🖒 Loading pytor 📀 Electramecca 😿 Cur	ris Stock Fo 🔯 1803.10704.pdf 🚽 Adressfeld	
	🗂 🛟 CropAware PS 👻	Q Search Products, resources, docs (/)	~	53 @ : R
DASHBOARD ACTIVITY	RECOMMENDATIONS			CUSTOMIZE
		_		
	Project info	Compute Engine	Google Cloud Platform status :	
	Project name CropAware PS	CPU (%)	Google BigQuery Google Analytics Daily BigQuery exports for certain customers may	
	Project number 349820780029	100%	experience delays Began at 2022-06-07 (17:49:06)	
	Project ID cropaware-ps		All times are US/Pacific Data provided by status.cloud.google.com	
ADD PEOPLE TO THIS PROJECT		40%	-> Go to Cloud status dashboard	
		20%		
	Go to project settings	11:45 12 PM 12:15 12:30 0	See Monitoring	
	-	Instance/cpu/utilization: 0.43%	Create my dashboard	
	Resources	→ Go to Compute Engine	Set up alerting policies	
	BigQuery Data warehouse/analytics		Presta untima charke	

9. Mark the instance *deeplab2022-instance* (can be a different instance name depending on the supervisor who creates it) and click "Start" (three dots menu) to

launch the instance.

← →	C a console.cloud.goog	le.com/compute/instanc	ces?project=cropaware-ps&	cloudshell=true&suppor	rtedpurview=proje	ect						> \$	o 🖸 🖸 😑 :	• 🗆 📵
I Ap	os 🛆 Recent-Googl M	Summer Rese ()	I'm getting a 👖 Artif	icial Intell 🧧 Cart	tpole-Intr 🍅	Loading pytor 🔇	Electrameco	ca 🚾 Curis	Stock Fo	1803.10704.	.pdf - <mark>, </mark> - Adressfe	ld		
	Google Cloud Platform	🐉 CropAware PS 👻			Q Search Pro	oducts, resources, docs							5. 3	9 : R
Ð	Compute Engine	VM instances	CREATE INSTANCE	🛓 IMPORT VM	C REFRESH	► START / RESUME	STOP	SUSPEND	也 RESET	1	⊗ OPERATIONS ▼	HELP ASSISTANT	F HIDE INFO PANEL	LEARN
rtual r	nachines ^	INSTANCES	INSTANCE SCHEDULES									Select an instan	ce	
	VM instances	INSTANCES	INSTANCE SCHEDULES									PERMISSIONS	LABELS MONIT	ORING
3	Instance templates	VM Instances are highly configurable virtual machines for running workloads on Google Infrastructure. Learn more												
3	Sole-tenant nodes	= Filter Enter pro	operty name or value								0 11	Please sel	ect at least one resource	
1	Machine images	Status	Name 1	Zone Reco	mmendations In	use by Internal IP	Ex	ternal IP Cont	nect		-			
8	TPUs	•	deeplab2022-instance	us-central1-a		10.128.0.2 (ni	c0)	SS	н - :					
3	Committed use discounts	Related actions									A HIDE			
L.	Migrate for Compute Engi			-				_						
rage	~			View billing repo View and manage your Co billing		II, Monitor VMs Explore VM logs View outlier VMs across metrics like CPU View, search, analyze, and di Instance logs			м					
3	Disks													
9	Snapshots	Control traffic to and		Patch management Schedule patch updates a										
[II]				compliance on VM instances										

- 10. The instance is a preconfigured VM. It has 4 CPU cores, 15 GB memory, 128 GB SSD disk, 1 NVIDIA K80 GPU, Ubuntu 18.04, CUDA 11.3 and NVIDIA drivers
- 11. Click on "SSH" to open a terminal and configure your machine (you have sudo rights). Now you are ready to start working on this machine!

		project=cropaware-ps&cloudshell=true&suppo getting a Artificial Intell 🧰 Car		🕃 Electramecca 📈 Curi	s Stock Fo 📴 1803.107	704.pdf - Adressfel/	> ☆ 🕲 🖸 🖶 🗖 📵
	💲 CropAware PS 👻		Q Search Products, resources, do	cs (/)		~	5 0 i 🖡
Compute Engine	VM instances	CREATE INSTANCE 👌 IMPORT VM	C REFRESH START / RESUME	STOP II SUSPEND	් RESET	OPERATIONS -	🖻 HELP ASSISTANT HIDE INFO PANEL 🗢 LEAR
Instance templates Image: Second Se	INSTANCE IN	Welcome to Uburti 18.04.15 (04U) • Documentation: https://hatbourden. • Support: https://hatbourden. Support: https://hatbourden. System indramation as or Thu Jun System i	<pre>cropoware-pd/cones/us-centrali-a/instance Linux 5.4.6-1075-gop x88_64) instriction w -anonical.com conductation 9 10:55:82 UTC 2022 Processes: 10 10:55:82 Processes: 10 10:55:82 P</pre>	es/deeplab2022-instance?auth	user-O&hiren_US≺	III MIDE	Select an instance PERMISSIONS LABELS MONITORING Please select at least one resource.

12. When you finish your work "Stop" the instance and wait until it shuts down!

Optionally:

- 13. To access the instance from outside via a terminal install the command line tool <u>gcloud</u> on your personal laptop. Connect gcloud with your google account.
- 14. To copy data to the instance from outside use gcloud compute scp or github
- 15. If you need a GUI on the instance follow this tutorial to setup a VNC server