Deep Learning Institute 사전 준비 사항

(부록 : QWIKLAB 사용법 안내)

Step1. 사이트 접속

http://nvidia.qwiklab.com



Step2. 우상단 회원 가입(Create New Account) 버튼 클릭

입력사항: 이름(First Name), 성(Last Name), 소속 (Company Name), E-mail, Password 입력합니다.

(로그인시 사용되는 ID는 E-mail 주소임)

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* Company Name						
<u>*</u> E-mail						
Password						
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Opt-in. Send me valuable promos and updates about new hands-on learning!						at
	Create a New Account					
	Sign in Forgot your password? Didn't receive confirmation instructions?					
4						• •

Step3. 인증메일 확인 및 계정 활성화

등록한 메일의 메일함을 열어보면 인증메일이 존재합니다. 이를 열어서 파란색 첫줄을 클릭해주 면 인증확인이 됩니다.



Step 4. Qwiklab 메일 발송

이름, 전화번호, 계정 등록시 사용한 email 을 행사 담당자에게 발송해야 합니다.

메일 주소는 다음과 같습니다 (kor_nvidia2017@naver.com)

(부록 : QWIKLAB 사용법 안내)

로그인 후 세션 실행

Introduction to Accelerated Computing 세션을 선택한 후 Start Lab 버튼을 클릭하여 서버를 켭 니다. 아마존 서버를 켜는데 약 4분 정도의 시간이 소요됩니다.



아마존 서버 켜는 중..

Start 버튼을 누르고 약 4분 정도 소요됨.

서버가 켜지는 동안 Instruction을 읽어 볼 것을 권장합니다. IPython Notebook의 원활한 접속을 위해 최신 브라우져와 원활한 네트워크 접속 환경이 필요합니다.

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Rate Lab: ★★★★★	troduction	to Accelerated Computing	% **Launching**	TIME REMAINING: DD:55:DD
Instructions - READ	First! 🗗	LAB DETAILS		CONNECTION ADDL. INFO
Setup Time (min.)	4	Tags: self-paced, C, C++, CUDA, OpenACC, Python, free		Levels: Introductory
Duration (min.) Access (min.)	45 55	Lab Description: Learn about the three techniques for accelerating code on a GF 45 minutes, you will work through a few different exercises der	PU; Libraries, Directives like OpenACC, and writin, nonstrating the potential speed-ups and ease of	g code directly in CUDA-enabled langauges. In use of porting to the GPU
		Date Created: April 14, 2016 09:40 AM AWS Region: [us-east-1] US East (N. Virginia)		
About Blog Partner Solutions Privacy Policy Terms Of Service		Dashboard Lab Catalogue Faqs Contact Buy Credits	0.	♥ ⑦ ۞ ₪ gwikLABS [®] '12-'16; a computer lab for everyone v.toscana(0512-0)
				Support

아마존 서버 작동

Click Here 버튼을 클릭하여 Lab을 시작합니다.

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Rate Lab: ★★★★★ Introduction to	Accelerated Computing	End	TIME REMAINING:	
Lab Connection Please follow the lab Instructions to connect to you lab Warning: Please do not transmit any data into the AWS resources used in this lab that are not related to qwikLABS® oo the hands-on lab you are taking	r Password: hdFT223zyrt Click here to launch your lab.	CONNECTION	Y ADDL, INFO	
* Opera 12.10 or above				
* Safari 5 or above				
* Internet Explorer 10 or above				
You can verify your system is suppo	ted by going to this test site and verifying the "WebSockets (Port 80)" section has all green checkmarks.			
1. If you haven't already, press the	"Start Lab" button			
After about 4 minutes, you'll be you can acess the instance by d	presented with your instance login information. While waiting, you can watch this video about the IPython N oing the following:	otebook platform we'll	be using. When it's ready,	
a. Copy the Password to your	clipboard		Â	
b. Click on the provided link to	open up the lab dashboard			
c. When prompted, paste the	given Password from your clipboard and click the Login button			
3. Once logged into the instance, s	elect the "GPU Computing - Click to Open" link to open the Notebook.			
4. Follow the in-lab instructions ar	id enjoy!			
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랩을 시작하면 Ipython 노트북이 실행됩니다.

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Getting Started with Accelerated Comp	uting
In this self-paced, hands-on lab, we will briefly explore some methods for acc	elerating applications on a GPU.
Lab created by Mark Ebersole (Follow @CUDAHamster on Twitter)	
The following timer counts down to a five minute warning before the lab insta reminding you to save your work!	nce shuts down. You should get a pop up at the five minute warning
46 MINUTES	35 SECONDS
Before we begin, let's verify <u>WebSockets</u> are working on your system. To do mouse), and hitting Ctri-Enter, or pressing the play button in the toolbar abov cell. If not, please consult the <u>Self-paced Lab Troubleshooting FAQ</u> to debug	his, execute the cell block below by giving it focus (clicking on it with your e. If all goes well, you should see get some output returned below the grey the issue.
<pre>In []: print "The answer should be three: " + str(1+2)</pre>	
Let's execute the cell below to display information about the GPUs running or	the server.
in []: [Invidia-smi	
If you have never before taken an IPython Notebook based self-paced lab for	m NVIDIA, please watch this video. It will explain the infrastructure we are

Python 입력 Cell에 마우스 클릭 후 실행버튼을 클릭하면 서버 측 결과를 확인할 수 있다.

특히, nvidia-smi 명령을 통해 아마존 서버에 nvidia GPU GRID K520이 장착된 것을 확인할 수 있 습니다.

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In [1]:	print "The answer should be three: " + str(1+2)			
	The answer should be three: 3			
	Let's execute the cell below to display information about the G	PUs running on the server.		_
In [2]:	!nvidia-smi			
	Tue May 17 14:55:28 2016 +			
	NVIDIA-SMI 346.46 Driver Version: 346.46			
	GPU Name Persistence-M Bus-Id Disp.A Fan Temp Perf Pwr:Usage/Cap Memory-Usage	Volatile Uncorr. ECC GPU-Util Compute M.		
	0 GRID K520 0n 0000:00:03.0 0ff N/A 29C P8 1711 / 12517 1041B / 409541B +	N/A O% Default		
	+ Processes: GPU PID Type Process name	GPU Memory Usage		
	No running processes found			
	Introduction to GPU Computing You may not realize it, but GPUs (GPU is short for Graphics P fact, there is a good chance that your daily life is being affected	rocessing Unit) are good fo d by GPU-accelerated com	r much more than displaying great graphics in video games. In puting.	
	GPU-accelerated computing is the use of a graphics processil applications. Pioneered by NVIDIA, GPUs now power energy- businesses around the world	ng unit (GPU) together with efficient datacenters in gove	a CPU to accelerate scientific, engineering, mobile and enterprise ernment labs, universitiles, enterprises, and small-and-medium	•