Working on AWS

Sign up to AWS educate

1. Create an AWS account if you don’t already have one. You must provide a valid payment method (credit/debit card) to create an account.
3. Select “Student”.
4. Fill in required information. Be sure to select “Technion - Israel Institute of Technology” under “Institution Name” and enter your campus/cs/ee Technion email address.
5. Under “Click here to enter an AWS Account ID”, type in your AWS account id. If you don’t know it, go to https://console.aws.amazon.com/billing/home?#/account after signing in to your account.
6. After a few minutes, you will be automatically approved for the educate program, and an email will be sent to you containing a redeemable credit code worth 100$.
7. Visit https://console.aws.amazon.com/billing/home#/credits and insert your code. The credits will immediately be added to your account.

Set up your instance

1. From the main AWS dashboard, click EC2:

   ![AWS dashboard](https://example.com/aws_dashboard)

2. Click on the blue “Launch instance” button, and in the new page select “Deep Learning AMI (Ubuntu) Version 9.0”:

   ![Launch instance button](https://example.com/launch_instance_button)

   **Step 1: Choose an Amazon Machine Image (AMI)**

   ![AMI selection](https://example.com/ami_selection)
3. Click on the “Filter by” drop-down menu and select “GPU Compute”. From the options, select p2.xlarge instance:

4. You will be prompted to create a new key pair to access the instance. Type in a name for this key pair, and click “download key pair”. **BE SURE TO STORE THIS IN A SECURE LOCATION, AS THIS IS THE ONLY TIME YOU WILL BE ALLOWED TO DOWNLOAD IT.**

5. Finally, click “Launch Instances”. You will land in a page looking like this:

If you want to create a billing alert (so you won’t accidentally exceed your 100$ credit), follow the instructions in the next section.

6. Your Instance is now Running, and thus using up your credits. To stop it, navigate to your AWS console home (click on the AWS icon on the top left corner of the page).

7. Click on “EC2”, which will get you to the EC2 dashboard. On the left side of the screen, click “instances”:

8. You will see your instance and its state (Running). Right-click on it, hover over “Instance State”, click “Stop” then approve. The instance will go to “Stopping” state, and then to “Stopped” state after a minute or two.
Create Billing Alert

1. Navigate to https://console.aws.amazon.com/billing/home#/budgets, and click “Create budget”. Give the budget a name (e.g., CreditsBudget), change the period to “Annually”, and set the budgeted amount (e.g., 100$).
2. Skip to the bottom of the page (Notifications section) and choose when to receive an alert (e.g., when the costs exceed 90% of the budgeted amount).
3. Enter your email address to receive the notification and click “Create”.

The p2.xlarge instance costs 0.9$ an hour, so each student can get ~111 hours of GPU computation time. Together with your partner, you get over 9.25 full days of GPU computation time, which should be more than enough for your project. Be sure to stop your instances when you are not using them.

Connecting to your instance

1. Start your instance from the EC2 Instances dashboard.
2. After a few seconds, the instance should be running:

3. Once it’s running, right click on it and click “connect”. You will be presented with instructions how to connect to your instance using SSH. This is the point where you need the key pair you’ve downloaded when you created the instance.
4. For Windows users, we recommend working with “MobaXTerm”, which makes logging in to your instance via SSH with a key and transferring files over SFTP very convenient.

Good Luck!