

Kevin Wang

---

# 2019 Semester 2 Progress

---

## Issues to address using Google Cloud

1. Installing packages can take up to 1.5 hours
2. Downloading data from School server can be throttled
3. Laptops might not handle the computations
4. Ad hoc changes to the GitHub repo could disrupt everything

---

# Cost

Running a 16 cores, 60GB RAM virtual machine in

- ▶ Sydney costs \$1.07 per hour
- ▶ HK costs \$1.06 per hour
- ▶ London costs \$0.97 per hour
- ▶ Taiwan costs \$0.88 per hour
- ▶ Oregon costs \$0.76 per hour



---

## 1. Setting up Google Cloud

- ▶ Go to <http://35.197.161.37/>.
- ▶ Type ``source("/home/setup.R")`` into your console.
- ▶ This copies a frozen copy of the ``SydneyBioX/SingleCellPlus`` repo into your working directory.

---

## 2. Testing out if we blow up the machine

- ▶ Type ``source("/home/user_test.R")`` into your console.
- ▶ This will run all the necessary computations in this workshop. Single run should take 6 minutes.

---

### 3. In case of major failure

- ▶ In case where files need to be changed for everyone, system admin can run ``sudo rm`` or ``sudo git clone`` to edit all files on disk.
- ▶ Users can just type ``source("/home/omg.R")`` into your console to edit the files on WD.



---

## Issues to address using Google Cloud

1. Installing packages can take up to 1.5 hours
2. Downloading data from School server can be throttled
3. Laptops might not handle the computations
4. Ad hoc changes to the GitHub repo could disrupt everything

---

## Issues to address using Google Cloud

1.

Not a problem!

2.

ALL packages and data on the cloud.  
Docker ensures a consistent user experience.

3.

4. omg.R updates materials in case of major failure