

## Individual Contributions for Project 1:

- All the resources in AWS was created by me which includes the following components:
  - Input bucket called cse546-project1-input to store the images received as input.
  - Output bucket called cse546-project1-output to store the results of the classification.
  - Input SQS queue called CSE546\_Project1\_Request to send image names from web-tier to app-tier.
  - Output SQS queue called CSE546\_Project1\_Response to send output from app-tier to web-tier.
  - Web-tier instance which was an Ubuntu VM with Java pre-installed to run the web-tier jar file.
  - Custom AMI which had the classification.py along with Java installed for the App-tier instance.
- Created the main logic of persistence:
  - The inputs which are received from the workload generator are first saved in the input S3 bucket.
  - In the app-tier after the classification algorithm has run, the output is saved in the output S3 bucket.
- Created the main logic which runs the python program of image recognition in the app-tier.
  - After the input is received in app-tier, I created the logic which runs the python command in the command line to run the classification algorithm.
- Implemented a part of auto scaling
  - Created the function which takes in integer as a parameter to determine the amount of instances to be created.
  - The amount is capped at 15 to account for the instances that are either shutting down or in some other pending states.
- Created the Project report.