**Setup**

* 20 clients
* Learning rate: 0.0001
* Number of PCA components: 30
* Subset of client: 10% for each training round
* Local epochs: 30

Training:

--algorithm FedPG --learning\_rate 0.0001 --num\_global\_iters 1000 --dim 30 --subusers 0.1 --local\_epochs 30

|  |  |  |  |
| --- | --- | --- | --- |
|  | Avg training time for each client | Total training time | Prediction time |
| FedPG C=30 | 0.03678163278102875 | 75.10011148452759 | 0.3469197750091553 |
| FedPE C=30 | 0.048787944197654726 | 99.03121781349182 | 0.36324453353881836 |
| FedPE C=40 | 0.06453633689880371 | 130.5272057056427 | 0.3710622787475586 |
| FedPE C=60 | 0.09722353363037109 | 195.97262120246887 | 0.3785524368286133 |
| FedPE C=80 | 0.130538999915123 | 262.6949083805084 | 0.36762285232543945 |

Differentiate number of users:

**F1-Score**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Number of users | 10 | 20 | 50 | 100 | 500 | 1000 |
| FedPG | 85.3 | 85.2 | 85 | 85.1 | 85.12 | 85.2 |
| FedPE | 65.3 | 78.8 | 82.2 | 82.7 | 85.6 | 85.5 |

Acc score

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Number of users | 10 | 20 | 50 | 100 | 500 | 1000 |
| FedPG | 85 | 84.99 | 84.76 | 83.57 | 83.88 | 83.8 |
| FedPE | 65.3 | 78.8 | 82.2 | 82.7 | 85.6 | 85.5 |