Readme file

The goal of this document is to let reviewers quickly find the code for any sub-figures and any row of Table 1.

Figure source description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Figure label in paper | File name of Figures | File name of ipynb code | Method name | Folder name (same color represents same folder) |
| Figure 3 (a) | QCL\_sinpix\_test.png | QCL\_sinpix.ipynb | QCL | \3.2\_3.3\_Data\_Embedding\QCL Master |
| Figure 3 (b) | QCL\_sin2pix\_test.png | QCL\_sin2pix.ipynb | QCL |
| Figure 3 (c) | QCL\_linear\_sin2pix\_test.png | QCL\_linear\_sin2pix.ipynb | QCL |
| Figure 3 (d) | sinpix\_test.png | sinpix.ipynb | QNN-exc2 | \3.2\_3.3\_Data\_Embedding\Our Method\_QNN |
| Figure 3 (e) | sin2pix\_test.png | sin2pix.ipynb | QNN-exc2 |
| Figure 3 (f) | linear\_sin2pix\_test.png | linear\_sin2pix.ipynb | QNN-exc2 |
|  |  |  |  |  |
| Figure 4 (a) | 1\_measurement1\_test.png | 1\_measurement1.ipynb | QNN-exc2 | \3.4\_Oblation\_Study\Redundant Measurement, QNN-exc2, f1v3, f2 |
| Figure 4 (b) | 2\_measurement1\_test.png | 2\_measurement1.ipynb | QNN-exc2 |
|  |  |  |  |  |
| Figure 4 (c) | xsinx\_qcl\_test.png | xsinx\_qcl.ipynb | QNN-exc1 | \3.2\_3.3\_Data\_Embedding\ X\_SinX\_f1v0, QNN-exc1, QNN-A2 |
| Figure 4 (f) | xsinx\_test.png | xsinx.ipynb | QNN-A2 |
|  |  |  |  |  |
| Figure 4 (d) | 1\_non\_square\_m2\_test.png | 1\_non\_square\_m2.ipynb | QNN-exc3 | \3.4\_Oblation\_Study\Objective Function, QNN-exc3, f1v3, f2 |
| Figure 4 (e) | 2\_non\_square\_test.png | 2\_non\_square.ipynb | QNN-exc3 |
|  |  |  |  |  |
| Figure 4 (g) | 1\_mesh\_m2\_test.png | 1\_mesh\_m2.ipynb | QNN-exc4 | \3.4\_Oblation\_Study\Random Training Data, QNN-exc4, f1v3, f2 |
| Figure 4 (h) | 2\_mesh\_test.png | 2\_mesh.ipynb | QNN-exc4 |
|  |  |  |  |  |
| Figure 4 (i) | sin2pix\_mesh\_nonsquare\_test.png | sin2pix\_mesh\_grid\_nonsquare.ipynb | QNN-exc5 | \3.2\_3.3\_Data\_Embedding\Our Method\_QNN |
| Figure 4 (j) | linear\_sin2pix\_test\_all.png | linear\_sin2pix\_all.ipynb | QNN-A |
| Figure 4 (k) | 2\_random\_test.png | 2\_measurement2.ipynb | QNN-A | \3.4\_Oblation\_Study\Redundant Measurement, QNN-exc2, f1v3, f2 |
|  |  |  |  |  |
| Figure 5 | q\_circuit\_f1v3\_appendix.png | 1\_non\_square\_m2.ipynb | QNN-exc3 | \3.4\_Oblation\_Study\Objective Function, QNN-exc3, f1v3, f2 |
| Figure 7 | q\_circuit\_f2\_appendix.png | 2\_non\_square.ipynb | QNN-exc3 |
| Figure 8 | q\_circuit\_f3\_appendix.png | D3\_all.ipynb | QNN-A | \3.4\_Oblation\_Study\3-dimensional Examples, QNN-A, QNN-exc234, f3 |
| Figure 9 | hist\_f1v3.png, hist\_f1v0.png | variance\_analysis\_2\_cases.ipynb | QNN-A | \3.5\_Variance\_Analysis |
| Figure 10 | training\_data\_result\_f1v3\_with\_mark.png | linear\_sin2pix\_all.ipynb | QNN-A | \3.2\_3.3\_Data\_Embedding\Our Method\_QNN |

Remark: Figure name ‘2\_random\_test’ is a renamed copy of figure name ‘2\_measurement2\_test’, and 2\_measurement2\_test is produced by 2\_measurement2.ipynb.

Table 1’s data source description

|  |  |  |  |
| --- | --- | --- | --- |
| Table row # | Method name | File name of ipynb code | Folder name (same color represents same folder) |
|  | Function | |  |
| 2 | QNN-exc2 | 1\_measurement1.ipynb | \3.4\_Oblation\_Study\Redundant Measurement, QNN-exc2, f1v3, f2 |
| 3 | QNN-exc3 | 1\_non\_square\_m2.ipynb | \3.4\_Oblation\_Study\Objective Function, QNN-exc3, f1v3, f2 |
| 4 | QNN-exc4 | 1\_mesh\_m2.ipynb | \3.4\_Oblation\_Study\Random Training Data, QNN-exc4, f1v3, f2 |
| 5 | QNN-A | 1\_measurement2.ipynb | \3.4\_Oblation\_Study\Redundant Measurement, QNN-exc2, f1v3, f2 |
|  | Function | |  |
| 6 | QNN-exc2 | 2\_measurement1.ipynb | \3.4\_Oblation\_Study\Redundant Measurement, QNN-exc2, f1v3, f2 |
| 7 | QNN-exc3 | 2\_non\_square.ipynb | \3.4\_Oblation\_Study\Objective Function, QNN-exc3, f1v3, f2 |
| 8 | QNN-exc4 | 2\_mesh.ipynb | \3.4\_Oblation\_Study\Random Training Data, QNN-exc4, f1v3, f2 |
| 9 | QNN-A | 2\_measurement2.ipynb | \3.4\_Oblation\_Study\Redundant Measurement, QNN-exc2, f1v3, f2 |
|  | Function | |  |
| 10 | QNN-exc2 | D3\_measurement1.ipynb | \3.4\_Oblation\_Study\3-dimensional Examples, QNN-A, QNN-exc234, f3 |
| 11 | QNN-exc3 | D3\_non\_square.ipynb |
| 12 | QNN-exc4 | D3\_mesh.ipynb |
| 13 | QNN-A | D3\_all.ipynb |