Perception learning example function AND

| | _ | | | | | | | | | | |
|----------------|-------|------------------|------------------|---------|---------|--------|-------------|--------|---------------|----------------|-------|
| | | Bins Input Xo=+1 | | | | | Alpha = 0.5 | | | | |
| | | | | | | | | | | | |
| Input | Input | | | | Net sum | Target | Actual | Al pha | weight values | | |
| X ₁ | X1 | 1.0 X WO | $X_1 \times W_1$ | X2 × W2 | Input | Output | output | Error | No | W ₁ | W, |
| 1 | | | | | | | | | 0.5 | 0.5 | 0.5 |
| 0 | 0 | 8.5 | 0 | 0 | 0.5 | 0 | 1 | -0.5 | 0 | 0.5 | 0. 9 |
| 0 | 1 | 0 | 0 | 0.5 | 0.5 | 0 | 1 | -0.5 | -0.5 | 0.5 | 0 |
| 1 | 0 | - 0.5 | 0.5 | 0 | 0 | 0 | 1 | -0.5 | -1 | 0 | 0 |
| 1 | 1 | -1 | 0 | 0 | 71 | 1 | 0 | -0.5 | - 0.5 | 0.9 | 0.5 |
| 0 | 0 | -0.5 | D | 0 | -0.5 | 0 | 0 | 0 | -0.5 | 0.5 | 0.5 |
| 0 | 1 | -0.6 | 0 | 0.5 | 0 | o | 1 | -0.5 | -1 | 0.5 | 0 |
| 1 | 0 | -1 | 0.5 | 0 | -0.5 | 0 | 0 | 0 | -1 | 0.5 | 0 |
| 1 | 1 | - 1 | 0.5 | 0 | -0.5 | 1 | 0 | 0.5 | -0.5 | 4 | 0.5 |
| 0 | 0 | -0.5 | 0 | 0 | - 0.5 | 0 | 0 | 0 | -0.5 | 1 | 0 - 5 |
| 0 | 1 | - 0.5 | 0 | 0.9 | 0 | 0 | 1 | -0.5 | -1 | ı | 0 |
| 1 | 0 | -1 | 1 | 0 | 0 | 0 | <u> </u> | -0.5 | - 1.5 | 0.5 | 0 |
| ı | | -1.5 | 0.5 | 0 | -1 | 1 | 0 | 0.5 | -1 | ŧ | 0.9 |
| 0 | 0 | -1 | o | 0 | -1 | 0 | 0 | o | -1 | 1 | D · 5 |
| 0 | 1 | -1 | 0 | 0.5 | - 0.9 | 0 | 0 | Ø | -1 | 1 | 0.9 |
| 1 | 0 | -1 | | 0 | 0 | 0 | 1 | -0.9 | - 1.5 | 0.5 | 0 - 5 |
| 1 | 1 | -1.5 | 0.5 | 0.5 | -0.9 | 1 | 0 | 0.5 | -1 | 1 | . 1 |
| 0 | 0 | -1 | 0 | 0 | -1 | 0 | 0 | 0 | -1 | ı | - 1 |
| 0 | 1 | -1 | 0 | 1 | 0 | 0 | 1 | -0.5 | _1.5 | 1 | 0.5 |
| 1 | 0 | -1.5 | 1 | 0 | -0.5 | 0 | 0 | 0 | -1.5 | 1 | 0.9 |
| 1 | l l | - 4. 5 | 1 | 0.5 | U | 1 | 1 | o | - 1.5 | 1 | 0.5 |
| 0 | o | -1.5 | 0 | 0 | -1.5 | 0 | 0 | 0 | -1.5 | 1 | 0.5 |
| U | 1 | -1.5 | 0 | 0.5 | -(| 0 | 0 | 0 | - 1.5 | 1 | 0.5 |
| 4 | 0 | -1.5 | 1 | 0 | -0.9 | o | 0 | 0 | - 1.5 | 1 | 0.5 |
| 1 | 1 | -1.5 | 1 | 0.5 | 0 | 1 | | 0 | -1.5 | 1 | 0.5 |