

α Low-Rank Interaction Block

$$Z_{L}^{(l+1)} = \sigma(W_{L_{O}}\left(E^{(1)} \cdot \left(E^{(l)}\right)^{\mathsf{T}} W_{L_{I}}\right) + b_{L})$$

 β High-Rank Interaction Block

$$Z_{C}^{(l+1)} = \sigma(W_{C_{O}}\left(E^{(l)} \cdot \left(E^{(l)}\right)^{\mathsf{T}} W_{C_{I}}\right) + b_{C})$$

 γ Implicit Interaction Block $\begin{array}{c|cccc}
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OO & \hline
OO &$

$$\begin{bmatrix}
OO \\
OO \\
OO
\end{bmatrix} = \sigma \begin{pmatrix}
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OOO
\end{pmatrix} \times \begin{pmatrix}
OO \\
OO \\
OO
\end{pmatrix} + \begin{pmatrix}
OO \\
OO
\end{pmatrix}$$

$$Z_D^{(l+1)} = \sigma (W_D E^{(l)} + b_D)$$