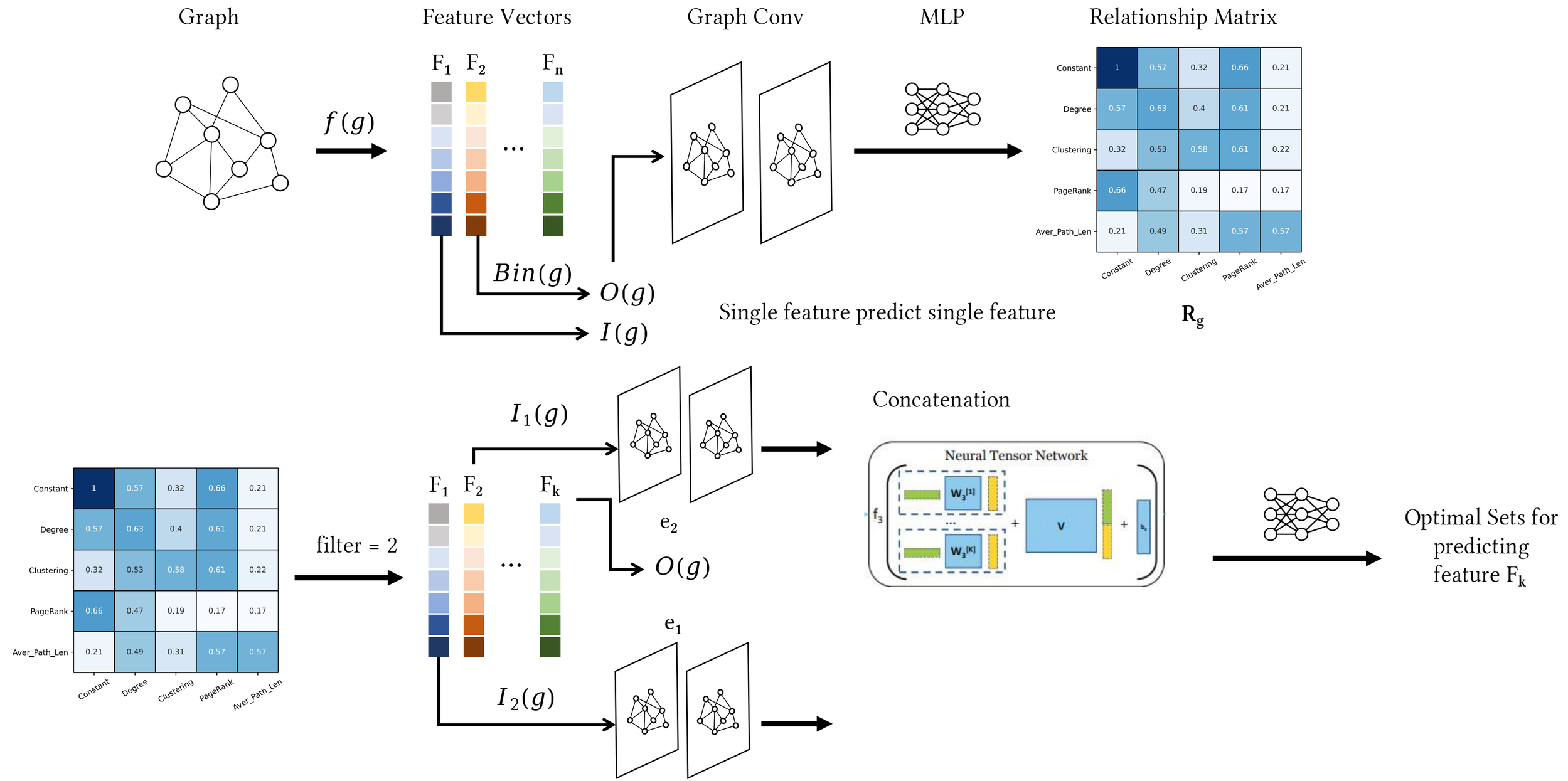
Graph
Feature Vectors
Graph Conv
MLP
Relationship Matrix
$f(g)$
F_1 F_2 ... F_n
$Bin(g)$
$O(g)$
$I(g)$
Constant 1 0.57 0.32 0.66 0.21
Degree 0.57 0.63 0.4 0.61 0.21
Clustering 0.32 0.53 0.58 0.61 0.22
PageRank 0.66 0.47 0.19 0.17 0.17
Aver_Path_Len 0.21 0.49 0.31 0.57 0.57
Constant Degree Clustering PageRank Aver_Path_Len
Single feature predict single feature
$\mathbf{R_g}$
Concatenation
filter = 2
$I_1(g)$
$I_2(g)$
e_1
e_2
Neural Tensor Network
$W_3^{[1]}$
$W_3^{[k]}$
V
Optimal Sets for predicting feature F_k
Multiple features predict single feature