

Table 1: Document classification accuracy on citation networks with L1 distance (%).

Label Rate Dataset	1 label per class				2 labels per class				5 labels per class			
	Cora	CiteSeer	PubMed	Large Cora	Cora	CiteSeer	PubMed	Large Cora	Cora	CiteSeer	PubMed	Large Cora
<i>Shoestring-L1</i> GCN	58.2 _(1.2)	47.9 _(1.4)	61.4 _(5.4)	44.8 _(4.8)	65.7 _(1.1)	54.2 _(1.4)	64.4 _(5.4)	52.0 _(4.6)	72.7 _(1.1)	60.5 _(1.4)	71.1 _(5.4)	60.2 _(4.6)
IGCN _(RNM)	66.6 _(1.3)	53.7 _(1.5)	62.3 _(5.7)	51.3 _(5.0)	71.1 _(1.2)	59.2 _(1.5)	67.1 _(5.7)	54.6 _(5.0)	74.9 _(1.2)	63.3 _(1.5)	72.1 _(5.6)	59.6 _(5.0)
IGCN _(AR)	67.0 _(2.4)	52.6 _(2.5)	63.6 _(8.2)	51.5 _(8.9)	71.7 _(2.2)	58.9 _(2.5)	68.0 _(8.4)	54.6 _(8.9)	74.6 _(2.2)	63.5 _(2.5)	72.8 _(8.1)	59.2 _(8.9)
GLP _(RNM)	62.2 _(0.9)	49.6 _(1.0)	61.1 _(1.1)	45.8 _(2.6)	68.7 _(0.8)	57.3 _(1.0)	66.9 _(1.1)	52.3 _(2.6)	73.0 _(0.8)	62.4 _(1.0)	72.0 _(1.1)	57.8 _(2.6)
GLP _(AR)	62.4 _(4.0)	49.7 ₍₁₇₎	63.3 _(8.0)	46.2 ₍₂₆₎	69.1 _(3.8)	58.2 ₍₁₇₎	68.2 _(7.9)	52.8 ₍₂₇₎	73.3 _(3.8)	63.0 ₍₁₇₎	72.9 _(7.8)	59.2 ₍₂₇₎

Table 2: Document classification accuracy on citation networks for 3, 4, 20 labeled data (%).

Label Rate Dataset	3 labels per class				4 labels per class				20 labels per class			
	Cora	CiteSeer	PubMed	Large Cora	Cora	CiteSeer	PubMed	Large Cora	Cora	CiteSeer	PubMed	Large Cora
LP	55.7 _(0.1)	38.5 _(0.1)	60.3 _(0.2)	39.3 _(0.3)	57.4 _(0.1)	40.3 _(0.1)	62.3 _(0.2)	41.3 _(0.3)	67.8 _(0.1)	47.7 _(0.1)	73.3 _(0.2)	52.5 _(0.3)
GCN	61.0 _(0.6)	48.2 _(0.9)	64.9 _(4.8)	44.9 _(3.9)	65.8 _(0.6)	53.7 _(0.9)	67.3 _(4.8)	48.9 _(3.8)	79.8 _(0.7)	68.1 _(0.9)	78.0 _(5.4)	67.4 _(3.8)
ST-CT	69.7 _(5.5)	58.5 _(8.6)	66.0 ₍₅₁₎	47.4 ₍₃₇₎	72.0 _(5.6)	62.6 _(8.7)	68.7 ₍₅₂₎	50.9 ₍₃₇₎	80.1 _(5.8)	70.1 _(9.1)	77.6 ₍₅₄₎	66.0 ₍₁₈₎
IGCN _(RNM)	64.8 _(0.6)	49.6 _(0.9)	66.1 _(4.9)	47.5 _(4.2)	69.1 _(0.6)	53.9 _(0.9)	68.0 _(4.9)	53.5 _(4.2)	80.9 _(0.7)	68.4 _(1.0)	77.6 _(5.5)	68.5 _(3.9)
IGCN _(AR)	65.7 _(1.0)	50.2 _(1.2)	66.9 _(5.7)	49.2 _(8.8)	70.0 _(0.9)	54.5 _(1.2)	68.7 _(5.7)	53.7 _(8.8)	81.3 _(1.4)	68.6 _(1.7)	78.5 _(8.5)	68.8 _(6.4)
GLP _(RNM)	66.6 _(0.4)	53.2 _(0.7)	65.4 _(0.7)	48.2 _(2.2)	68.9 _(0.4)	56.2 _(0.7)	68.1 _(0.8)	53.4 _(2.2)	80.7 _(0.3)	67.7 _(0.4)	77.7 _(0.4)	68.1 _(1.5)
GLP _(AR)	65.9 _(4.0)	53.2 ₍₁₉₎	67.1 _(9.2)	50.5 ₍₂₆₎	68.5 _(4.0)	56.3 ₍₁₉₎	69.5 _(9.0)	53.0 ₍₂₆₎	81.2 _(1.8)	68.4 _(8.6)	78.8 _(3.9)	68.7 ₍₁₃₎
<i>Shoestring-L2</i> GCN	69.1 _(0.9)	61.3 _(1.3)	65.8 _(5.7)	55.4 _(4.1)	71.5 _(0.9)	62.8 _(1.4)	67.3 _(6.3)	57.2 _(4.6)	80.1 _(1.1)	69.2 _(1.4)	77.6 _(6.2)	67.9 _(4.4)
IGCN _(RNM)	73.5 _(1.1)	63.9 _(1.4)	66.0 _(6.3)	59.4 _(4.5)	75.2 _(1.1)	65.0 _(1.5)	69.3 _(6.9)	60.5 _(5.0)	80.8 _(1.1)	69.3 _(1.4)	77.1 _(6.4)	68.4 _(4.5)
IGCN _(AR)	74.0 _(2.4)	64.4 _(2.7)	67.0 ₍₁₁₎	59.8 _(8.5)	75.3 _(2.4)	65.4 _(3.1)	70.0 ₍₁₃₎	60.5 _(9.5)	81.0 _(2.0)	69.5 _(2.4)	77.7 _(9.4)	68.4 _(6.8)
GLP _(RNM)	73.2 _(0.6)	63.2 _(0.7)	65.5 _(0.8)	58.2 _(2.2)	74.6 _(0.6)	64.2 _(1.0)	67.9 _(1.2)	59.0 _(3.4)	80.6 _(0.7)	68.5 _(0.8)	76.8 _(0.9)	67.7 _(2.2)
GLP _(AR)	74.0 _(3.8)	63.7 ₍₁₆₎	67.4 _(7.6)	59.6 ₍₂₆₎	75.4 _(3.8)	64.7 ₍₁₉₎	69.0 ₍₁₀₎	60.4 ₍₃₄₎	81.3 _(2.5)	69.0 ₍₁₀₎	78.3 _(5.2)	68.3 ₍₁₆₎
<i>Shoestring-L2</i> GCN	70.4 _(1.2)	58.6 _(1.5)	66.9 _(6.0)	57.7 _(4.7)	72.1 _(1.3)	60.7 _(1.5)	69.4 _(6.2)	60.1 _(4.8)	80.7 _(1.2)	68.6 _(1.5)	78.9 _(6.0)	70.5 _(4.7)
IGCN _(RNM)	74.3 _(1.3)	61.2 _(1.7)	69.4 _(6.6)	60.0 _(5.1)	75.7 _(1.4)	63.0 _(1.6)	71.0 _(6.8)	61.0 _(5.2)	81.4 _(1.4)	68.7 _(1.6)	78.2 _(6.2)	70.4 _(4.8)
IGCN _(AR)	74.5 _(2.8)	61.7 _(3.1)	70.1 ₍₁₂₎	60.0 _(9.6)	76.0 _(2.8)	63.3 _(3.0)	71.8 ₍₁₂₎	60.9 _(9.3)	81.7 _(2.8)	68.9 _(2.4)	78.8 _(8.9)	69.9 _(6.7)
GLP _(RNM)	73.8 _(0.9)	60.3 _(1.1)	69.2 _(1.2)	69.0 _(3.0)	74.8 _(0.9)	61.7 _(1.0)	70.5 _(1.2)	59.9 _(2.9)	81.0 _(0.9)	67.9 _(0.9)	78.1 _(1.0)	69.8 _(2.1)
GLP _(AR)	74.5 _(4.1)	60.7 ₍₁₇₎	70.3 _(8.1)	60.3 ₍₂₈₎	75.9 _(4.0)	62.4 ₍₁₇₎	71.7 _(8.5)	61.5 ₍₂₇₎	81.9 _(2.1)	68.6 _(9.0)	79.7 _(4.4)	70.1 ₍₁₄₎
<i>Shoestring-L1</i> GCN	69.0 _(1.1)	57.8 _(1.4)	66.9 _(5.4)	55.9 _(4.6)	71.1 _(1.1)	59.7 _(1.4)	70.0 _(5.4)	58.3 _(4.6)	80.0 _(1.2)	67.9 _(1.5)	78.2 _(5.6)	68.7 _(4.7)
IGCN _(RNM)	72.8 _(1.2)	61.2 _(1.5)	69.0 _(5.6)	57.0 _(5.0)	73.6 _(1.2)	62.6 _(1.5)	71.5 _(5.6)	58.6 _(5.0)	80.0 _(1.2)	67.8 _(1.5)	77.9 _(5.7)	68.6 _(4.9)
IGCN _(AR)	73.2 _(2.2)	60.3 _(2.5)	69.9 _(8.1)	56.7 _(8.9)	73.8 _(2.2)	62.5 _(2.5)	72.1 _(8.1)	58.1 _(8.9)	79.9 _(1.8)	68.5 _(2.1)	78.5 _(7.0)	67.3 _(6.9)
GLP _(RNM)	70.9 _(0.8)	59.6 _(1.0)	69.0 _(1.1)	54.7 _(2.6)	71.8 _(0.8)	61.7 _(1.0)	71.3 _(1.1)	57.0 _(2.6)	79.1 _(0.9)	67.4 _(1.0)	77.5 _(1.0)	67.0 _(2.2)
GLP _(AR)	71.6 _(3.8)	60.3 ₍₁₆₎	70.2 _(7.8)	56.3 ₍₂₇₎	72.6 _(3.7)	62.2 ₍₁₆₎	72.8 _(7.8)	58.3 ₍₂₆₎	79.3 _(2.5)	67.7 _(9.0)	79.1 _(4.6)	67.5 ₍₁₄₎