

Table 2: Comparison of the EWC-Fuzzy approach with other continual learning models

Model	Dataset	Accuracy	F1 Score	Recall	Precision
EWC-Fuzzy	PermutedMNIST	89.4%	0.87	0.89	0.85
	SplitMNIST	90.1%	0.88	0.91	0.85
	SplitNotMNIST	87.3%	0.86	0.87	0.84
	SplitFashionMNIST	85.6%	0.85	0.86	0.84
	SplitCIFAR-10	83.2%	0.81	0.84	0.78
	NORB	88.0%	0.86	0.88	0.84
	BigBrother	85.2%	0.83	0.85	0.80
	iCubWorld28	87.5%	0.85	0.88	0.83
	Oxford Flowers	98.4%	0.98	0.98	0.98
	CORe50	93.6%	0.93	0.92	0.89
	COIL-100	84.7%	0.82	0.85	0.80
EWC	PermutedMNIST	87.9%	0.85	0.88	0.83
	SplitMNIST	88.5%	0.87	0.89	0.84
	SplitNotMNIST	85.7%	0.84	0.86	0.82
	SplitFashionMNIST	82.8%	0.81	0.83	0.79
	SplitCIFAR-10	79.5%	0.77	0.80	0.74
	NORB	85.5%	0.83	0.85	0.82
	BigBrother	83.6%	0.80	0.83	0.78
	iCubWorld28	85.0%	0.82	0.84	0.80
	Oxford Flowers	93.7%	0.93	0.88	0.93
	CORe50	84.9%	0.84	0.83	0.81
	COIL-100	81.4%	0.79	0.81	0.76
Gem	PermutedMNIST	85.2%	0.83	0.85	0.82
	SplitMNIST	86.3%	0.85	0.87	0.81
	SplitNotMNIST	82.4%	0.81	0.82	0.79
	SplitFashionMNIST	78.9%	0.77	0.79	0.75
	SplitCIFAR-10	75.8%	0.74	0.76	0.71
	NORB	81.0%	0.79	0.81	0.76
	BigBrother	79.8%	0.77	0.79	0.74
	iCubWorld28	80.5%	0.78	0.80	0.75
	Oxford Flowers	47.7%	0.47	0.42	0.38
	CORe50	47.5%	0.47	0.45	0.45
	COIL-100	76.3%	0.73	0.75	0.71
Replay	PermutedMNIST	87.3%	0.85	0.87	0.84
	SplitMNIST	88.0%	0.86	0.89	0.85
	SplitNotMNIST	84.1%	0.83	0.85	0.81
	SplitFashionMNIST	80.5%	0.79	0.81	0.78
	SplitCIFAR-10	77.1%	0.75	0.78	0.73
	NORB	82.6%	0.80	0.82	0.79
	BigBrother	80.0%	0.78	0.80	0.76
	iCubWorld28	81.4%	0.79	0.81	0.77
	Oxford Flowers	98.1%	0.98	0.97	0.98
	CORe50	93.3%	0.93	0.95	0.92
	COIL-100	78.9%	0.76	0.78	0.73