

Table 1: Classification results (in %) on the test set.

Class	NB	SVM	F-ULMFiT	B-ULMFiT	F+B-ULMFiT	Count
Casa Civil	66.67	78.95	80.00	82.35	88.24	18
Controladoria	80.00	80.00	100.00	100.00	100.00	2
Defensoria Pblica	100.00	100.00	100.00	100.00	100.00	8
Poder Executivo	80.00	85.71	78.26	90.91	86.96	10
Poder Legislativo	66.67	100.00	66.67	66.67	100.00	1
Agricultura	50.00	66.67	57.14	50.00	57.14	4
Cultura	91.67	91.67	91.67	91.67	91.67	13
Desenv. Econmico	66.67	66.67	66.67	66.67	66.67	4
Desenv. Urbano	75.00	75.00	75.00	85.71	75.00	4
Economia	66.67	100.00	100.00	100.00	100.00	1
Educao	76.19	91.67	81.48	75.00	88.00	13
Fazenda	90.48	90.48	95.00	95.24	97.56	21
Justia	75.00	66.67	60.00	66.67	66.67	5
Obras	88.24	90.91	88.24	76.92	85.71	18
Sade	92.75	92.31	92.31	94.12	95.52	32
Segurana Pblica	98.99	94.34	94.34	97.09	94.34	50
Transporte	94.74	97.56	92.31	92.31	97.56	20
Meio Ambiente	100.00	100.00	66.67	0.00	0.00	2
Tribunal de Contas	100.00	100.00	100.00	100.00	100.00	11
Average F1	82.09	87.82	83.46	80.6	83.74	237
Weighted F1	88.68	90.49	88.90	88.88	90.88	237
Accuracy	88.61	90.72	89.03	89.45	91.56	237

Table 2: Ablation scenarios results (in %) on the test set.

Model	Average F1	Weighted F1	Accuracy
No gradual unfreezing (f)	86.57 (+3.11)	88.80 (-0.10)	89.03 (+0.00)
No gradual unfreezing (b)	88.05 (+7.45)	92.30 (+3.42)	92.41 (+2.96)
No gradual unfreezing (f+b)	89.18 (+5.44)	92.57 (+1.69)	92.83 (+1.27)
Last layer fine-tuning (f)	65.59 (-17.87)	76.51 (-12.39)	77.64 (-11.39)
Last layer fine-tuning (b)	60.93 (-19.67)	76.22 (-12.66)	78.06 (-11.39)
Last layer fine-tuning (f+b)	68.01 (-15.73)	77.92 (-12.96)	79.32 (-12.24)
No LM fine-tuning (f)	39.61 (-43.85)	58.79 (-30.11)	63.71 (-25.32)
No LM fine-tuning (b)	39.81 (-40.79)	61.80 (-27.08)	65.82 (-23.63)
No LM fine-tuning (f+b)	44.32 (-39.42)	66.33 (-24.55)	69.26 (-22.30)
Direct transfer (f)	11.46 (-72.00)	24.59 (-64.31)	34.18 (-54.85)
Direct transfer (b)	12.29 (-68.31)	27.35 (-61.53)	38.40 (-51.05)
Direct transfer (f+b)	12.36 (-71.38)	26.35 (-64.53)	37.97 (-53.59)