Appendix I

Non–Attributive Explanations Produced

Table I.1: The proportion of non-attributive explanations produced by each XAI technique for each model. Brighter colour indicates more non-attributive explanations.

		XGBoost				Logit				Naïve Bayes		
	LIME	SHAP	LINDA	ACV	LIME	SHAP	LINDA	ACV	LIME	SHAP	LINDA	ACV
Breast Cancer	0.0000	0.0000	0.5000	0.0200	0.0000	0.0000	0.5000	0.1000	0.9700	0.0000	0.4800	0.0100
Compas	0.0000	0.0000	0.1100	0.2000	0.0000	0.0000	0.2400	0.1600	0.0000	0.0000	0.4500	0.2400
Diabetes	0.0000	0.0000	0.1500	0.4700	0.0000	0.0000	0.4600	0.6600	0.0000	0.0000	0.4200	0.8000
Income	0.0000	0.0000	0.2800	0.1800	0.0000	0.0000	0.4600	0.0800	0.0000	0.0000	0.3100	0.8500
Iris	0.0000	0.0000	0.8846	0.0000	0.0000	0.0000	0.9615	0.0000	0.0000	0.0000	0.9615	0.0000
Mushroom	0.0000	0.0000	1.0000	0.0000	0.0000	0.0000	1.0000	0.1000	0.0000	0.0000	0.9700	0.0100
Nursery	0.0000	0.0000	1.0000	0.0000	0.0000	0.0000	1.0000	0.0000	0.0000	0.0000	1.0000	0.0000

Table I.2: The proportion of non-attributive explanations produced by each XAI technique for each model. Brighter colour indicates more non-attributive explanations.

		XGBoost				Logit				Naïve Bayes			
		LIME	SHAP	LINDA	ACV	LIME	SHAP	LINDA	ACV	LIME	SHAP	LINDA	ACV
Single & Aggregate	BPIC2012	0.0000	0.0000	0.0804	0.1607	0.0000	0.0000	0.0000	1.0000	0.0000	0.0000	0.9554	1.0000
	Production	0.0000	0.0000	0.3839	0.5804	0.0000	0.0000	0.3393	0.7321	0.0000	0.0000	0.2232	0.8482
	Sepsis Cases	0.0000	0.0000	0.3393	0.0893	0.0000	0.0000	0.0804	0.5536	0.0000	0.0000	0.2768	0.7321
Prefix & Aggregate	BPIC2012	0.0000	0.0000	0.1250	0.8482	0.0000	0.0000	0.2500	1.0000	0.3571	0.0000	0.5357	1.0000
	Production	0.0000	0.0000	0.3929	0.9911	0.0000	0.0000	1.0000	0.9554	0.0714	0.0000	1.0000	1.0000
	Sepsis Cases	0.0000	0.0000	0.3661	0.7054	0.2143	0.0000	1.0000	0.5804	0.2054	0.0000	1.0000	0.7143
Prefix & Index	BPIC2012	0.0000	0.0000		0.8571	0.0000	0.0000		1.0000	0.0000	0.0000		1.0000
	Production	0.0000	0.0000		0.9821	0.0000	0.0000		1.0000	0.7857	0.0000		1.0000
	Sepsis Cases	0.0000	0.0000		0.6786	0.0000	0.0000		0.5804	0.0000	0.0000		0.6875