

	SMOTE Tomek				ROS				Tomek				SMOTE ENN				SMOTE			
	acc	balacc	nodes	time	acc	balacc	nodes	time	acc	balacc	nodes	time	acc	balacc	nodes	time	acc	balacc	nodes	time
iris	0.9467+0.05 σ	0.9467+0.05 σ	7.4+1.5 σ	0.23+0.0 σ	0.9467+0.05 σ	0.9467+0.05 σ	7.4+1.5 σ	0.0+0.0 σ	0.9467+0.05 σ	0.9467+0.05 σ	7.4+1.5 σ	0.12+0.0 σ	0.94+0.01 σ	0.94+0.01 σ	5.0+0.0 σ	0.35+0.0 σ	0.9467+0.05 σ	0.9467+0.05 σ	7.4+1.5 σ	0.12+0.0 σ
heart	0.7921+0.05 σ	0.7838+0.06 σ	33.0+3.58 σ	0.24+0.0 σ	0.7807+0.02 σ	0.7751+0.02 σ	22.6+7.63 σ	0.0+0.0 σ	0.7546+0.05 σ	0.7484+0.04 σ	26.6+10.07 σ	0.12+0.0 σ	0.7698+0.05 σ	0.7471+0.05 σ	12.6+6.37 σ	0.24+0.0 σ	0.8143+0.04 σ	0.8086+0.05 σ	26.2+6.65 σ	0.12+0.0 σ
cars	0.9739+0.0 σ	0.9394+0.01 σ	112.2+2.71 σ	0.26+0.0 σ	0.9786+0.0 σ	0.9654+0.02 σ	136.6+6.5 σ	0.0+0.0 σ	0.9728+0.01 σ	0.9372+0.01 σ	109.0+4.56 σ	0.13+0.0 σ	0.9166+0.01 σ	0.9181+0.02 σ	53.4+4.63 σ	0.49+0.0 σ	0.9745+0.0 σ	0.9401+0.01 σ	113.8+0.98 σ	0.12+0.0 σ
ecoli	0.8384+0.05 σ	0.7891+0.05 σ	25.0+3.58 σ	0.24+0.0 σ	0.7735+0.08 σ	0.7422+0.05 σ	61.0+4.2 σ	0.0+0.0 σ	0.8563+0.03 σ	0.7885+0.06 σ	27.4+4.08 σ	0.12+0.0 σ	0.8353+0.05 σ	0.807+0.06 σ	18.6+3.67 σ	0.59+0.0 σ	0.8356+0.06 σ	0.7871+0.06 σ	31.4+8.8 σ	0.12+0.0 σ
wisconsinBreast	0.9484+0.01 σ	0.9489+0.01 σ	19.0+8.39 σ	0.24+0.0 σ	0.9585+0.01 σ	0.9585+0.01 σ	27.4+10.07 σ	0.0+0.0 σ	0.9628+0.02 σ	0.9638+0.02 σ	21.8+7.0 σ	0.12+0.0 σ	0.9556+0.01 σ	0.9524+0.01 σ	17.0+4.0 σ	0.24+0.0 σ	0.9484+0.01 σ	0.9488+0.02 σ	17.8+3.40 σ	0.12+0.0 σ
wine	0.9214+0.04 σ	0.9266+0.03 σ	8.6+0.8 σ	0.24+0.0 σ	0.9155+0.03 σ	0.9205+0.02 σ	9.0+0.0 σ	0.0+0.0 σ	0.9047+0.03 σ	0.9108+0.02 σ	9.0+1.26 σ	0.12+0.0 σ	0.7693+0.09 σ	0.7759+0.08 σ	6.2+1.6 σ	0.35+0.0 σ	0.9155+0.03 σ	0.9205+0.02 σ	9.0+0.0 σ	0.12+0.0 σ

	ENN				Cluster				INN				Imbalanced				RUS				SMOTE SVM			
	acc	balacc	nodes	time	acc	balacc	nodes	time	acc	balacc	nodes	time	acc	balacc	nodes	time	acc	balacc	nodes	time	acc	balacc	nodes	time
iris	0.9467+0.05 σ	0.9467+0.05 σ	7.4+1.5 σ	0.23+0.0 σ	0.9467+0.05 σ	0.9467+0.05 σ	7.4+1.5 σ	0.11+0.0 σ	0.9467+0.05 σ	0.9467+0.05 σ	7.4+1.5 σ	0.01+0.0 σ	0.94+0.04 σ	0.94+0.04 σ	6.6+1.5 σ	0.0+0.0 σ	0.94+0.02 σ	0.94+0.02 σ	7.0+1.79 σ	0.0+0.0 σ	0.9467+0.05 σ	0.9467+0.05 σ	7.4+1.5 σ	0.35+0.0 σ
heart	0.7993+0.04 σ	0.7934+0.04 σ	29.8+10.17 σ	0.12+0.0 σ	0.7511+0.05 σ	0.7488+0.05 σ	21.8+8.91 σ	0.14+0.0 σ	0.7882+0.04 σ	0.7804+0.04 σ	29.0+8.39 σ	0.06+0.0 σ	0.8067+0.02 σ	0.8009+0.03 σ	21.4+9.75 σ	0.0+0.0 σ	0.7995+0.07 σ	0.7988+0.07 σ	30.6+12.09 σ	0.0+0.0 σ	0.7898+0.05 σ	0.7743+0.05 σ	21.4+9.16 σ	0.47+0.0 σ
cars	0.9716+0.01 σ	0.9324+0.02 σ	108.2+6.27 σ	0.36+0.0 σ	0.9691+0.01 σ	0.9441+0.01 σ	35.0+1.25 σ	0.55+0.01 σ	0.9691+0.01 σ	0.9398+0.01 σ	3.8+0.98 σ	0.76+0.0 σ	0.9716+0.01 σ	0.9398+0.01 σ	104.6+11.93 σ	0.9+0.0 σ	0.8345+0.02 σ	0.9017+0.01 σ	119.4+4.3 σ	0.0+0.0 σ	0.9745+0.0 σ	0.9401+0.01 σ	113.2+2.4 σ	0.53+0.0 σ
ecoli	0.8295+0.07 σ	0.7756+0.07 σ	23.4+5.28 σ	0.47+0.0 σ	0.7654+0.1 σ	0.7429+0.07 σ	15.8+2.99 σ	0.11+0.0 σ	0.445+0.06 σ	0.3457+0.06 σ	5.0+1.26 σ	0.07+0.0 σ	0.8356+0.07 σ	0.7745+0.07 σ	23.8+2.71 σ	0.0+0.0 σ	0.7521+0.08 σ	0.7443+0.07 σ	14.2+2.71 σ	0.0+0.0 σ	0.8444+0.04 σ	0.7957+0.06 σ	29.4+5.43 σ	0.48+0.0 σ
wisconsinBreast	0.9556+0.01 σ	0.9592+0.01 σ	13.4+1.5 σ	0.47+0.08 σ	0.9556+0.02 σ	0.9534+0.02 σ	23.0+7.36 σ	0.65+0.27 σ	0.9384+0.02 σ	0.9481+0.01 σ	10.6+2.94 σ	0.14+0.0 σ	0.947+0.02 σ	0.9439+0.02 σ	19.0+4.3 σ	0.0+0.0 σ	0.9398+0.01 σ	0.9423+0.01 σ	15.0+2.83 σ	0.0+0.0 σ	0.9484+0.01 σ	0.9527+0.01 σ	17.8+3.92 σ	0.48+0.0 σ
wine	0.9101+0.03 σ	0.9161+0.02 σ	9.4+0.8 σ	0.24+0.0 σ	0.8867+0.06 σ	0.8935+0.06 σ	9.8+2.4 σ	0.11+0.0 σ	0.8928+0.05 σ	0.8975+0.04 σ	8.6+1.5 σ	0.03+0.0 σ	0.9101+0.03 σ	0.9161+0.02 σ	9.4+0.8 σ	0.0+0.0 σ	0.8985+0.04 σ	0.908+0.03 σ	8.6+1.5 σ	0.0+0.0 σ	0.9155+0.03 σ	0.9232+0.03 σ	9.8+0.98 σ	0.47+0.0 σ

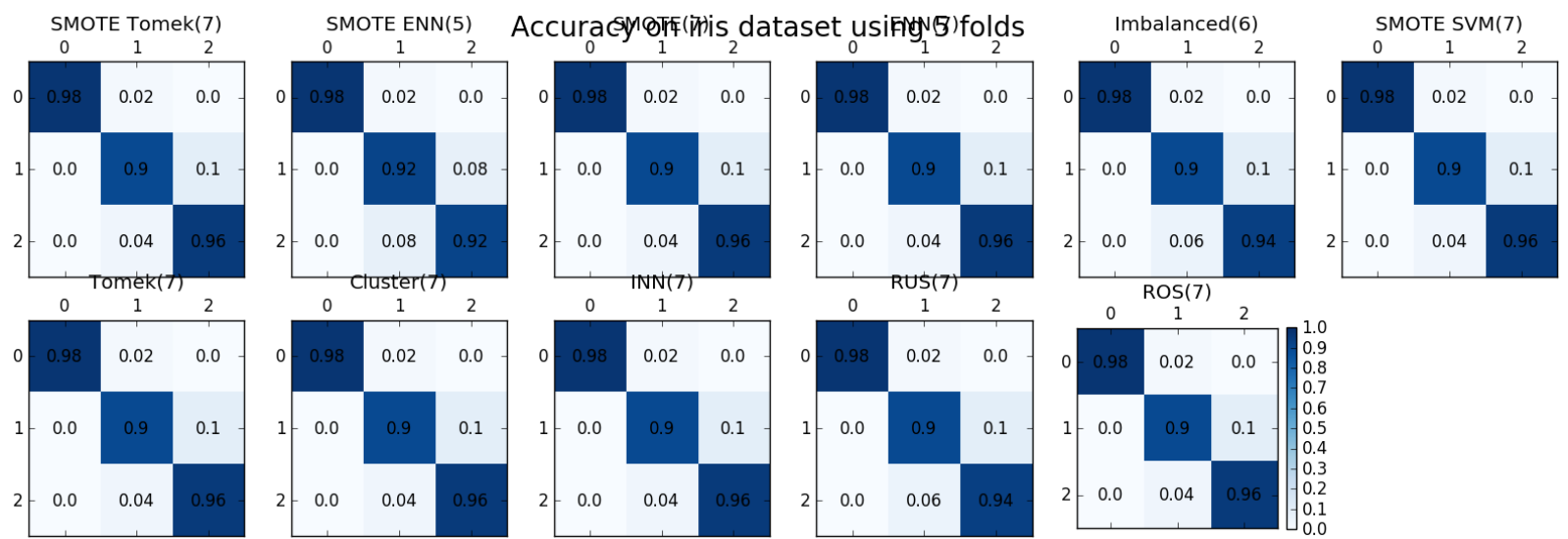


Figure 1: Confusion matrix for iris

Accuracy on heart dataset using 5 folds

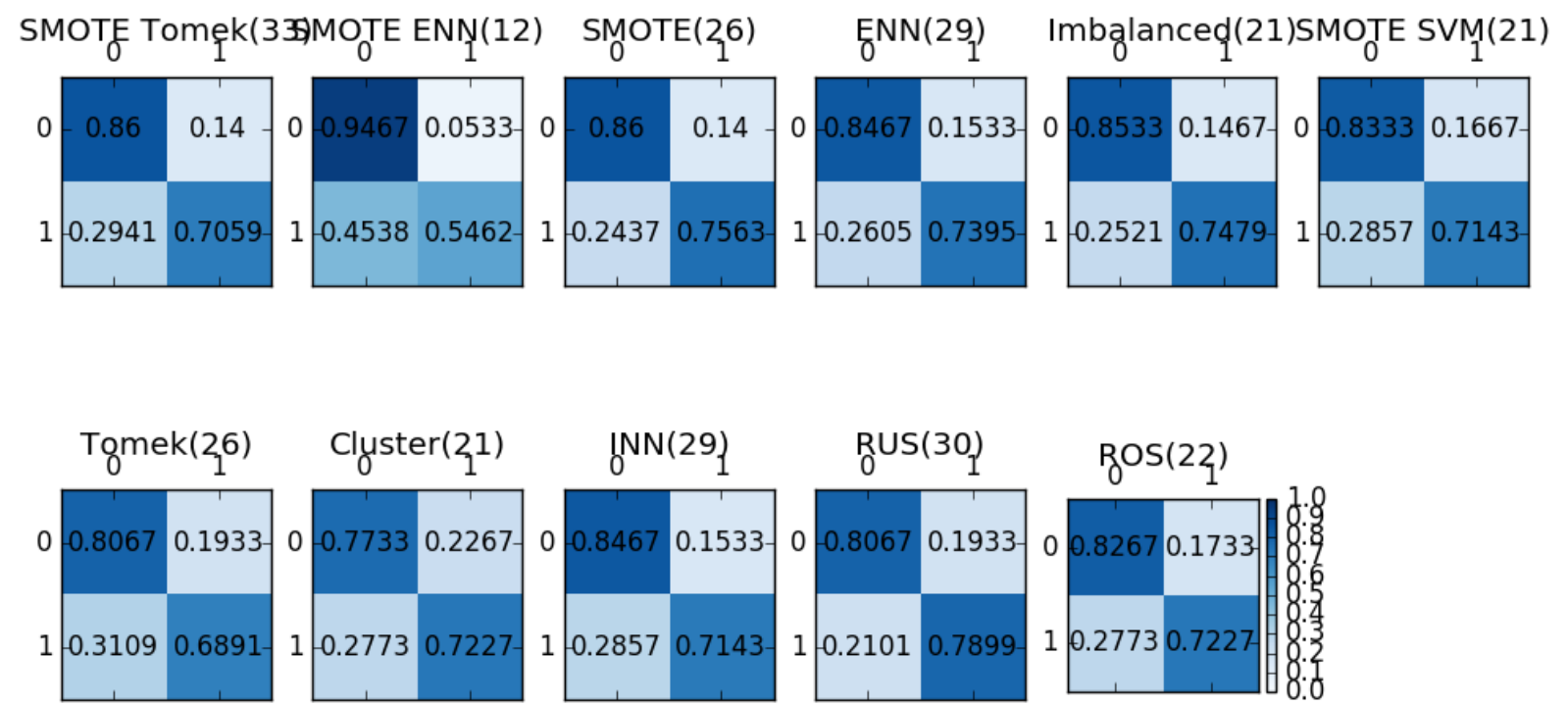


Figure 2: Confusion matrix for heart

Accuracy on cars dataset using 5 folds

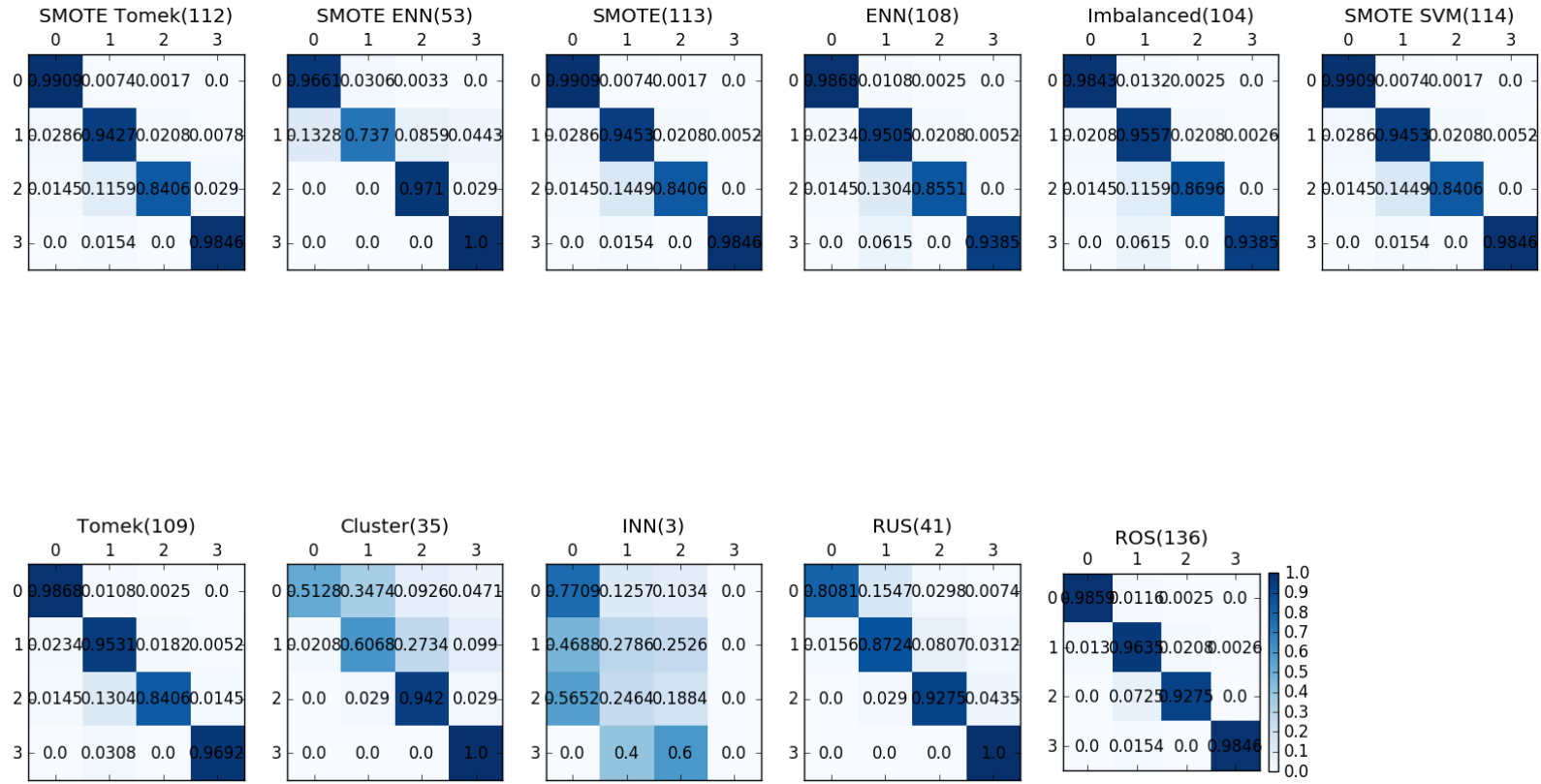


Figure 3: Confusion matrix for cars

Accuracy on ecoli dataset using 5 folds

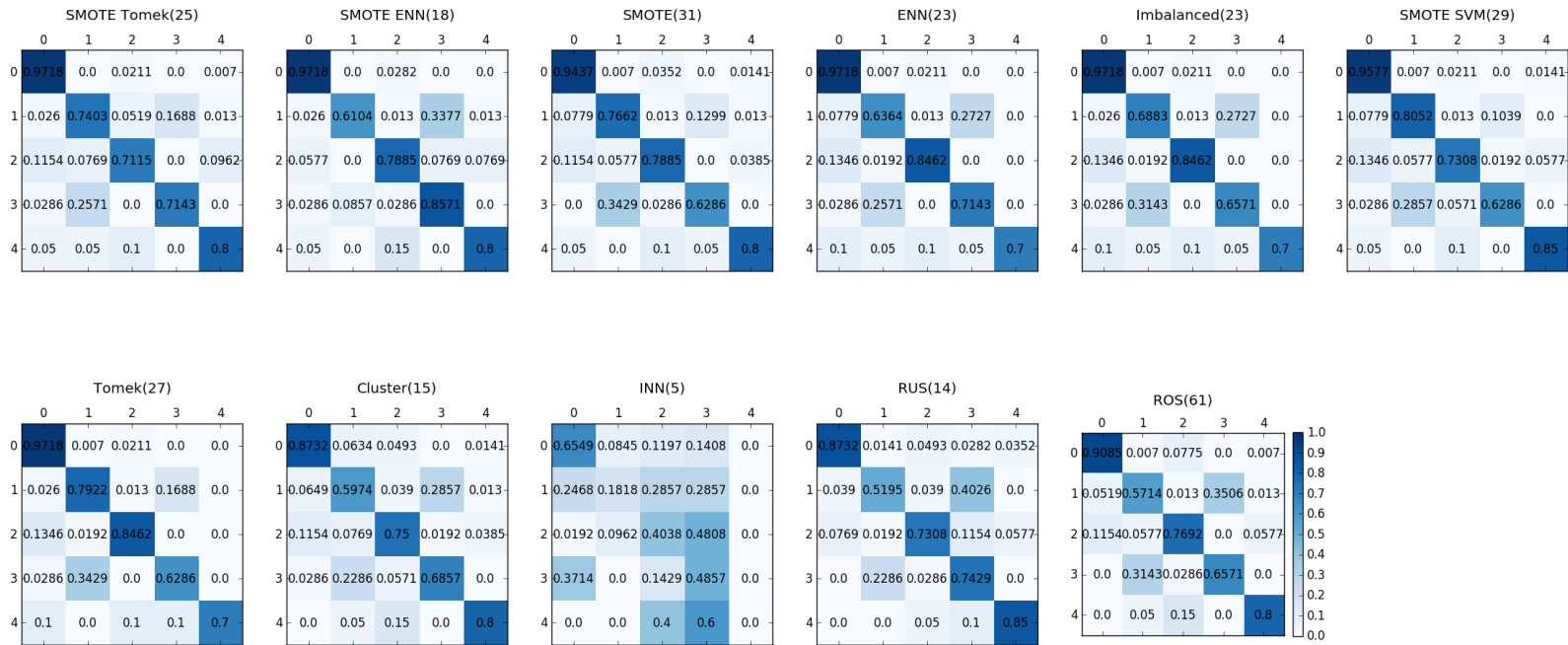


Figure 4: Confusion matrix for ecoli

Accuracy on wisconsinBreast dataset using 5 folds

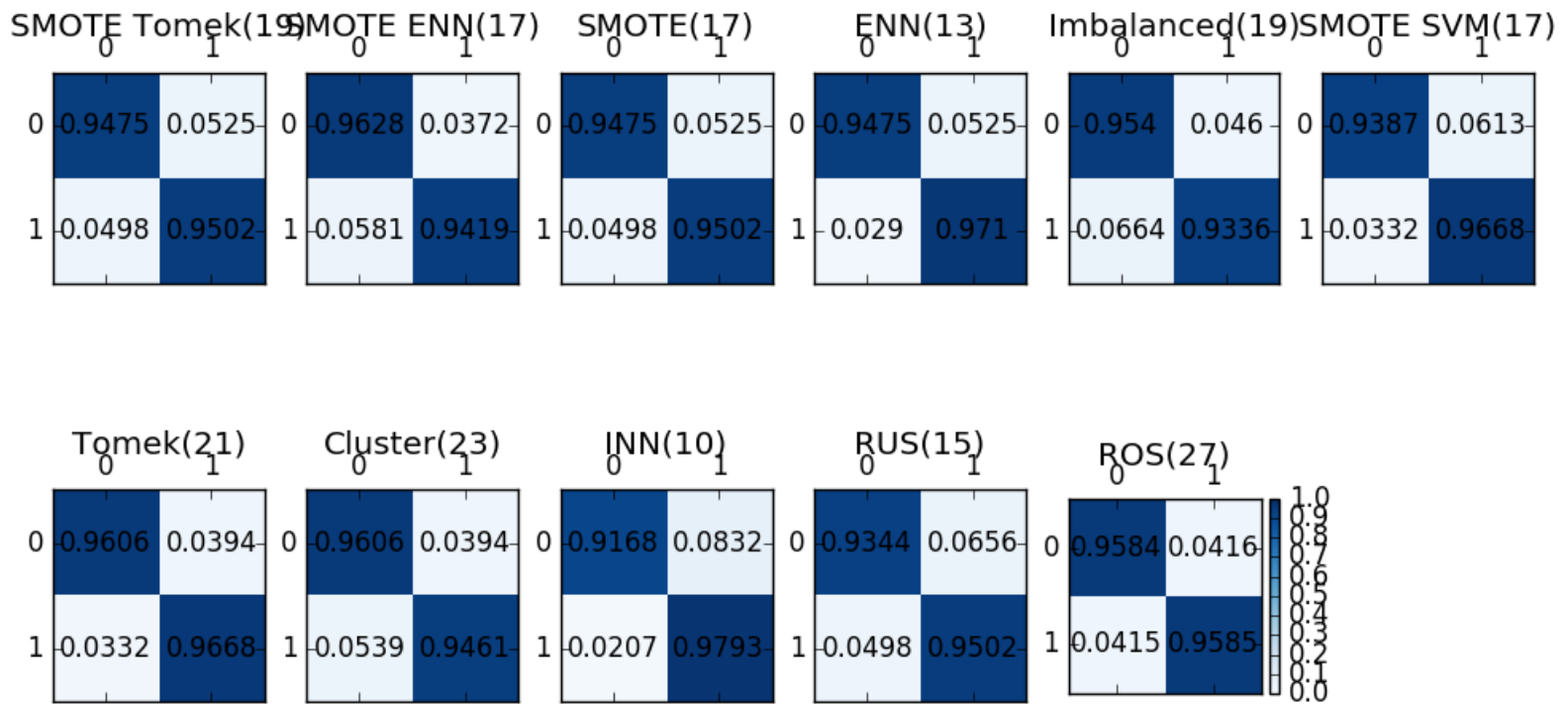


Figure 5: Confusion matrix for wisconsinBreast



Figure 6: Confusion matrix for wine