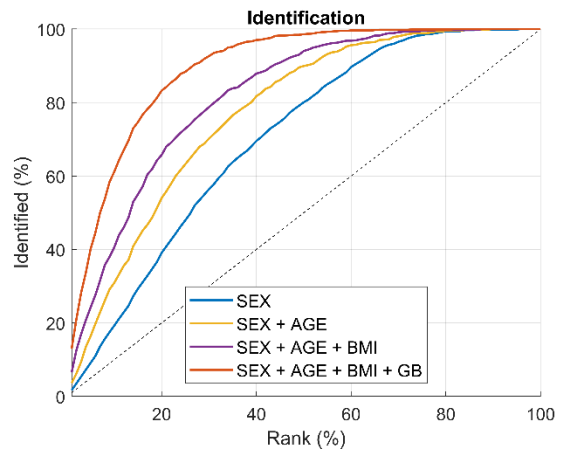
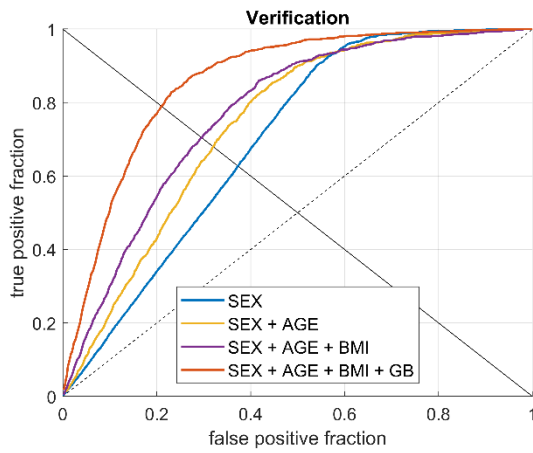
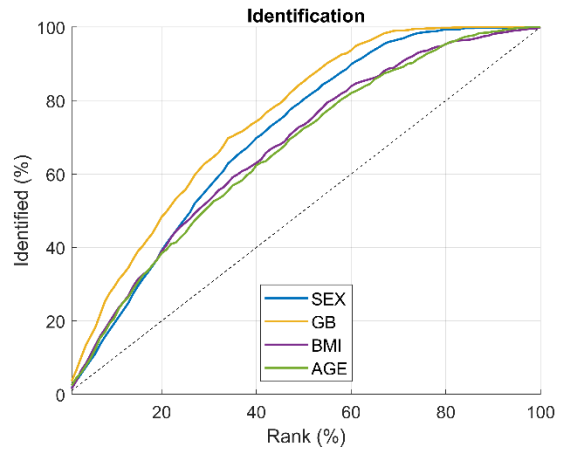
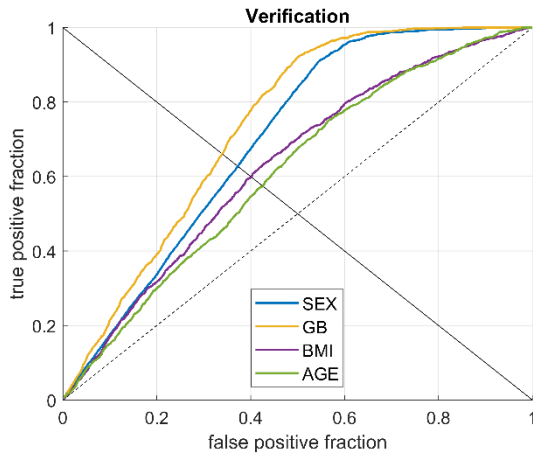


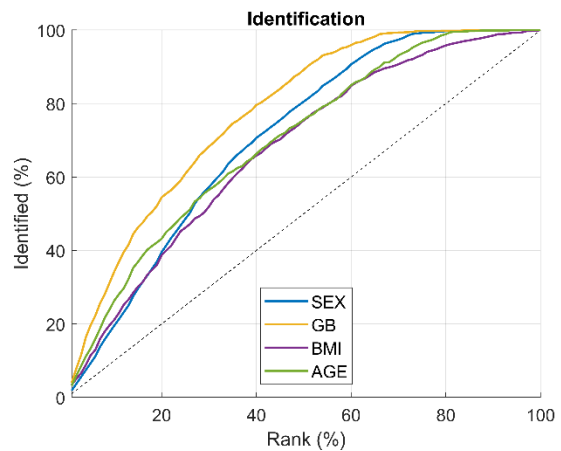
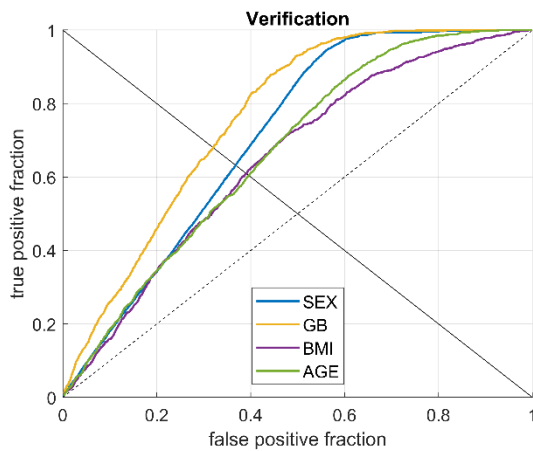
# Supplementary material 1

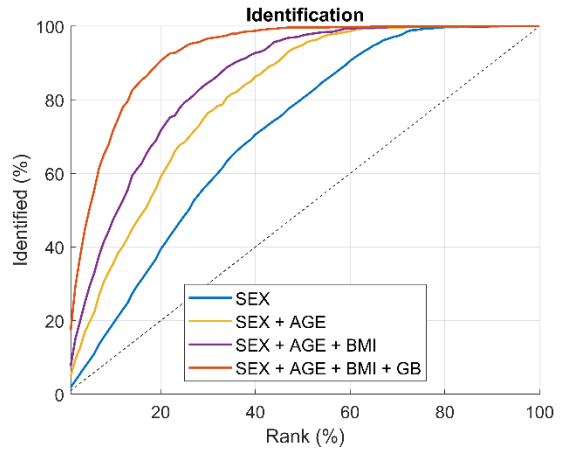
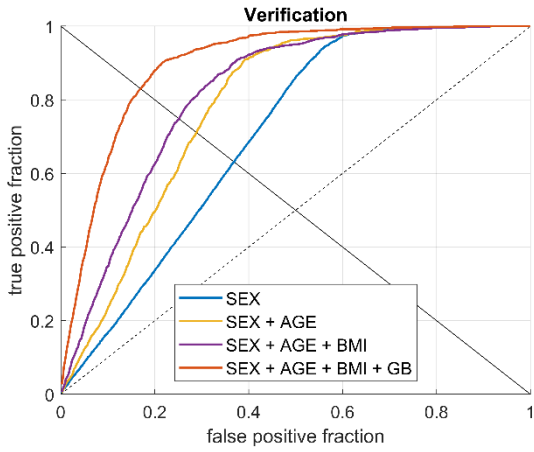
Verification (ROC) and identification (CMC) curves for both traits individually and cumulatively for each of the experiments

## i. PCA-based encoding

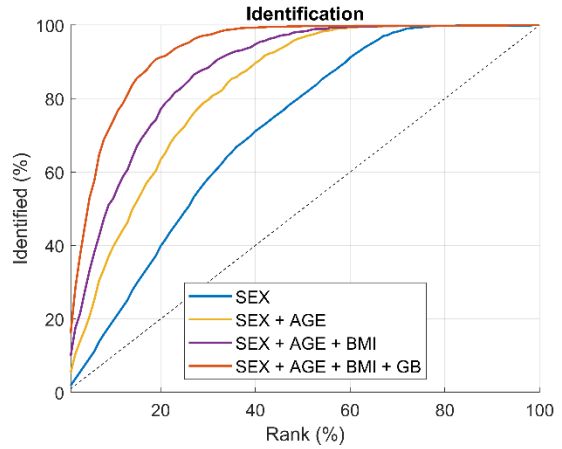
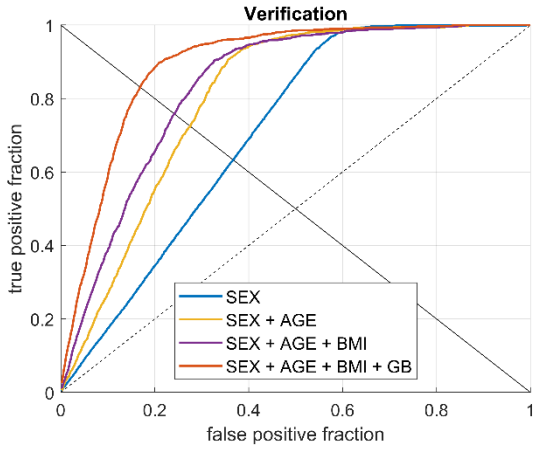
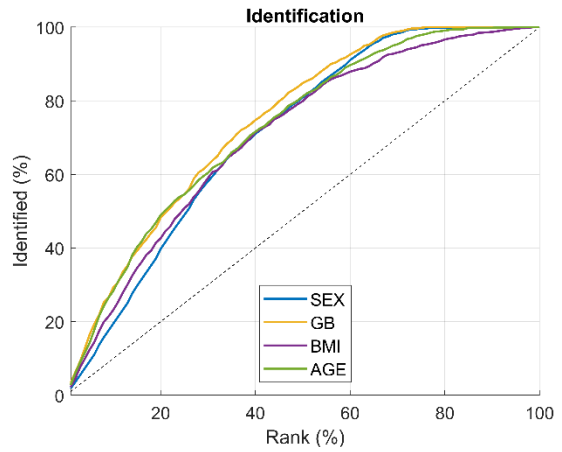
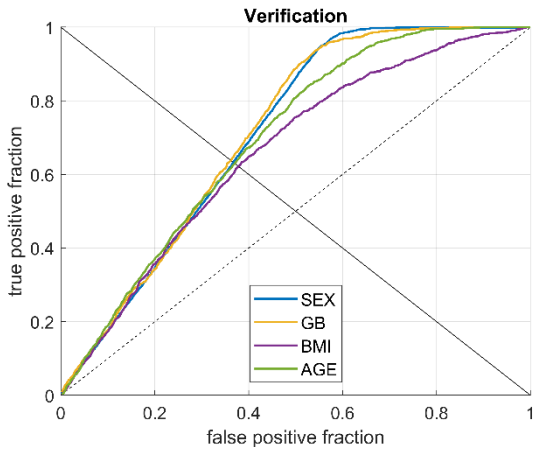


## ii. PCA-based encoding combined with part-based learning

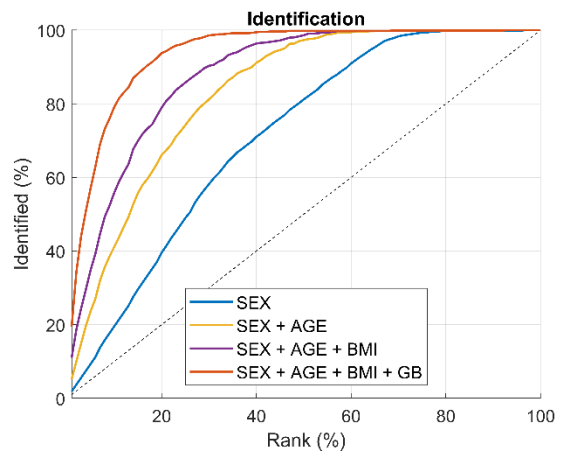
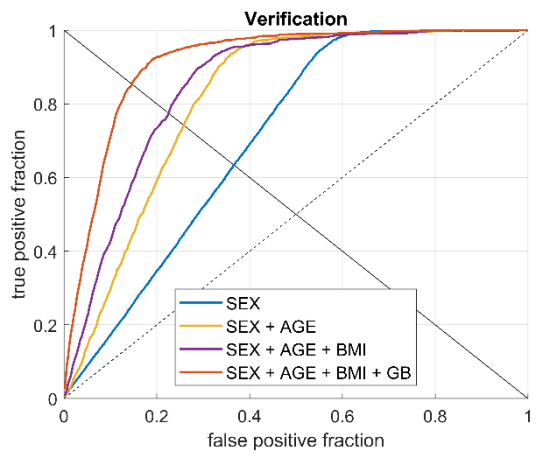
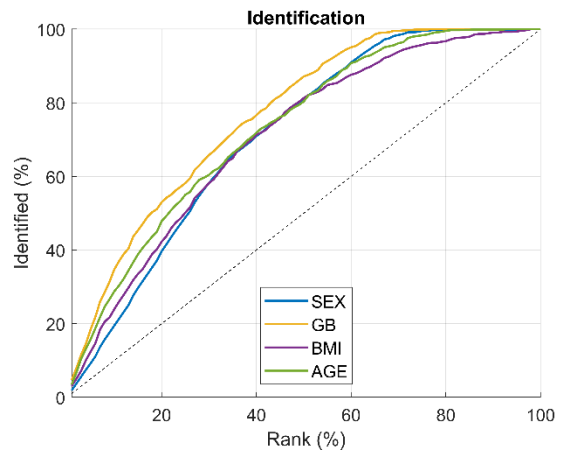
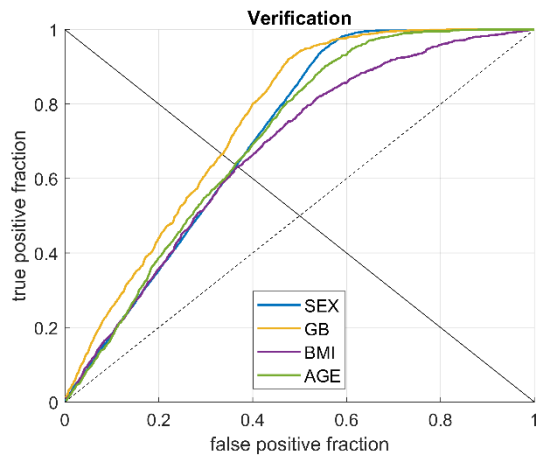




iii. GML-based encoding



iv. GML-based encoding combined with part-based learning



# Supplementary material 2

Table showing mean  $\pm$  std results for verification and identification when combining the GML (applied to a full face only) with (a) Fusion-Net and when using (b) SVM classifiers and regressors with a linear naive Bayes score fuser. Cumulative identification results for the Fusion-Net (a-Iden.) are lower than those for SVM + linear fuser (b-Iden.), and its contribution in verification scenario is very low (a-Ver. vs b-Ver.). This observation, and the impractical training procedure of the Fusion-Net with part-based embeddings, makes the linear fuser a better choice for evaluating the effect of our part-based GML.

			Sex	Age	BMI	GB	Sex + Age	Sex + Age + BMI	Sex + Age + BMI + GB
(a)	Ver.	EER	.39 $\pm$ .03	.36 $\pm$ .03	.35 $\pm$ .03	.29 $\pm$ .01	.27 $\pm$ .03	.28 $\pm$ .03	<b>.17 <math>\pm</math> .01</b>
		AUC	.69 $\pm$ .02	.71 $\pm$ .01	.71 $\pm$ .01	.79 $\pm$ .01	.81 $\pm$ .03	.81 $\pm$ .03	<b>.91 <math>\pm</math> .00</b>
	Iden.	R1(%)	2 $\pm$ 00	4 $\pm$ 01	2 $\pm$ 01	5 $\pm$ 02	4 $\pm$ 02	6 $\pm$ 02	<b>15 <math>\pm</math> 02</b>
		R10(%)	20 $\pm$ 00	30 $\pm$ 02	24 $\pm$ 03	37 $\pm$ 03	36 $\pm$ 07	36 $\pm$ 08	<b>68 <math>\pm</math> 01</b>
		R20(%)	39 $\pm$ 00	47 $\pm$ 03	42 $\pm$ 02	60 $\pm$ 02	59 $\pm$ 08	58 $\pm$ 06	<b>88 <math>\pm</math> 01</b>
(b)	Ver.	EER	.37 $\pm$ .01	.37 $\pm$ .01	.39 $\pm$ .01	.36 $\pm$ .01	.27 $\pm$ .01	.24 $\pm$ .01	<b>.17 <math>\pm</math> .01</b>
		AUC	.71 $\pm$ .01	.69 $\pm$ .01	.65 $\pm$ .01	.72 $\pm$ .01	.81 $\pm$ .01	.83 $\pm$ .01	<b>.89 <math>\pm</math> .01</b>
	Iden.	R1(%)	2 $\pm$ 00	3 $\pm$ 01	2 $\pm$ 01	3 $\pm$ 01	5 $\pm$ 01	10 $\pm$ 02	<b>17 <math>\pm</math> 02</b>
		R10(%)	20 $\pm$ 00	29 $\pm$ 01	23 $\pm$ 03	30 $\pm$ 03	40 $\pm$ 02	54 $\pm$ 02	<b>75 <math>\pm</math> 02</b>
		R20(%)	40 $\pm$ 00	48 $\pm$ 04	42 $\pm$ 04	50 $\pm$ 03	64 $\pm$ 02	77 $\pm$ 02	<b>92 <math>\pm</math> 02</b>