

Supplementary File S4. The predictions of height from specific finger position

**Table S1.** Male height prediction testing results obtained from five validated models of VGG16

Male	Finger Position	Tall		Short		Accuracy (Mean±STD)	Accuracy
		Correct	Incorrect	Correct	Incorrect		
VGG16	All	131.8	68.2	123.8	76.2	63.9±4.1%	63.9%
	Exclude Thumb	93	67	113.4	46.6	64.5±2.6%	64.5%
	L1+R1	23.4	16.6	30	10	66.8±4.4%	66.8%
	L2+R2	27.6	12.4	24.4	15.6	65.0±3.6%	65.0%
	L3+R3	24.2	15.8	29	11	66.5±6.6%	66.5%
	L4+R4	28.8	11.2	27	13	69.8±4.4%	69.8%
	L5+R5	28.2	11.8	26	14	67.8±4.5%	67.8%

**Table S2.** Male height prediction testing results obtained from five validated models of Inception-v3

Male	Finger Position	Tall		Short		Accuracy (Mean±STD)	Accuracy
		Correct	Incorrect	Correct	Incorrect		
Inception V3	All	124.2	75.8	131	69	63.8±3.1%	63.8%
	Exclude Thumb	96.4	63.6	109.8	50.2	64.4±1.8%	64.4%
	L1+R1	20.2	19.8	26.6	13.4	58.5±6.8%	58.5%
	L2+R2	23.6	16.4	25	15	60.8±2.6%	60.8%
	L3+R3	28.2	11.8	21.8	18.2	62.5±4.4%	62.5%
	L4+R4	25.4	14.6	25.4	14.6	63.5±3.8%	63.5%
	L5+R5	23.6	16.4	25.4	14.6	61.3±2.7%	61.3%

**Table S3.** Male height prediction testing results obtained from five validated models of Resnet50

Male	Finger Position	Tall		Short		Accuracy (Mean±STD)	Accuracy
		Correct	Incorrect	Correct	Incorrect		
Resnet50	All	113	87	141.8	58.2	63.7±2.2%	63.7%
	Exclude Thumb	84.4	75.6	123.8	36.2	65.1±2.7%	65.1%
	L1+R1	25	15	24	16	61.3±2.8%	61.3%
	L2+R2	23.6	16.4	24.2	15.8	59.8±8.0%	59.8%
	L3+R3	19.4	20.6	30	10	61.8±5.8%	61.8%
	L4+R4	27.8	12.2	26	14	67.3±4.9%	67.3%
	L5+R5	28.4	11.6	22.4	17.6	63.5±2.4%	63.5%

**Table S4.** Female height prediction testing results obtained from five validated models of VGG16

Female	Finger Position	Tall		Short		Accuracy (Mean±STD)	Accuracy
		Correct	Incorrect	Correct	Incorrect		
VGG16	All	123.4	76.6	126.4	73.6	62.5±1.9%	62.5%
	Exclude Thumb	91.4	68.6	111.4	48.6	63.4±2.9%	63.4%
	L1+R1	23.6	16.4	26.6	13.4	62.8±7.3%	62.8%
	L2+R2	26.8	13.2	20.2	19.8	58.8±5.4%	58.8%
	L3+R3	16.4	23.6	32.4	7.6	61.0±6.8%	61.0%
	L4+R4	27.2	12.8	23	17	62.8±5.8%	62.8%
	L5+R5	23.8	16.2	29.8	10.2	67.0±4.2%	67.0%

**Table S5.** Female height prediction testing results obtained from five validated models of Inception-v3

Female	Finger Position	Tall		Short		Accuracy (Mean±STD)	Accuracy
		Correct	Incorrect	Correct	Incorrect		
Inception V3	All	146.8	53.2	95.2	104.8	60.5±2.3%	60.5%
	Exclude Thumb	101.6	58.4	96.2	63.8	61.8±2.2%	61.8%
	L1+R1	19.2	20.8	25.2	14.8	55.5±5.6%	55.5%
	L2+R2	18.8	21.2	28	12	58.5±4.5%	58.5%
	L3+R3	27	13	20.4	19.6	59.3±4.6%	59.3%
	L4+R4	27.8	12.2	18.6	21.4	58.0±5.0%	58.0%
	L5+R5	28.6	11.4	26.4	13.6	68.8±8.1%	68.8%

**Table S6.** Female height prediction testing results obtained from five validated models of Resnet50

Female	Finger Position	Tall		Short		Accuracy (Mean±STD)	Accuracy
		Correct	Incorrect	Correct	Incorrect		
Resnet50	All	98.4	101.6	152.8	47.2	62.8±3.6%	62.8%
	Exclude Thumb	85.2	74.8	123.8	36.2	65.3±3.7%	65.3%
	L1+R1	15.8	24.2	29.6	10.4	56.8±7.1%	56.8%
	L2+R2	21	19	26.2	13.8	59.0±6.5%	59.0%
	L3+R3	25	15	25.4	14.6	63.0±8.5%	63.0%
	L4+R4	21.8	18.2	27	13	61.0±7.6%	61.0%
	L5+R5	24.8	15.2	24.4	15.6	61.5±6.8%	61.5%