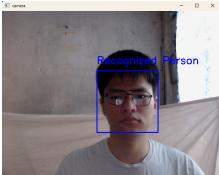
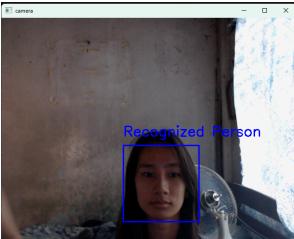
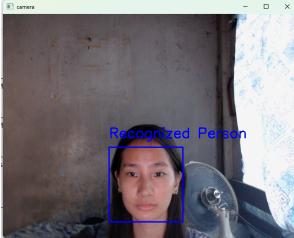
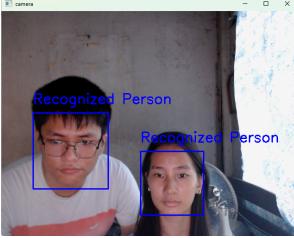
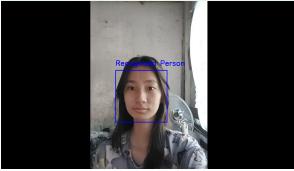
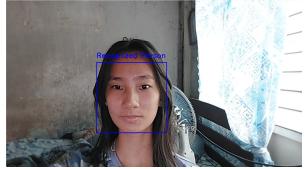
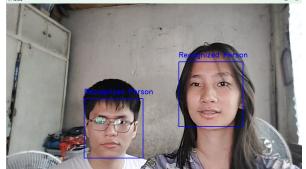
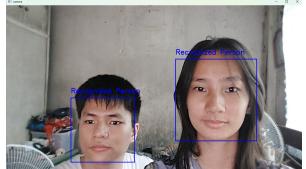
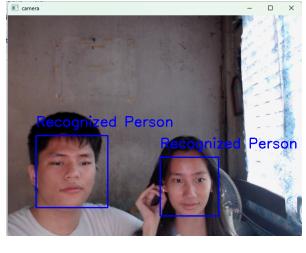
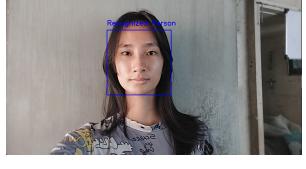


The testing involves using 2 cameras (phone and computer camera). The area is limited to my bedroom, and the faces used are me for “recognized”, and a girl for “not recognized”. For my face, there are variations with wearing and not wearing eyeglasses, and different brightness.

Eigen Faces Recognizer Model

Trial No.	Image	Expected Output	Actual Output	Remarks
1		Recognized Person	Recognized Person	Matched
2		Recognized Person	No Output	Mismatch
3		Recognized Person	Recognized Person	Matched
4		Recognized Person	Recognized Person	Matched
5		Recognized Person	Recognized Person	Matched
6		Recognized Person	Recognized Person	Matched
7		Recognized Person	Recognized Person	Matched

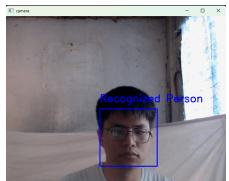
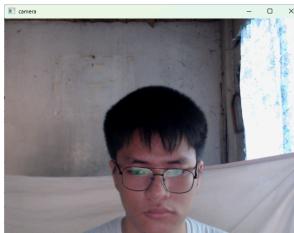
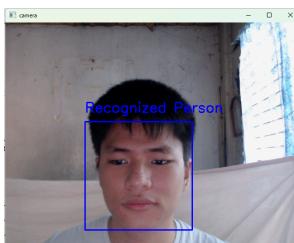
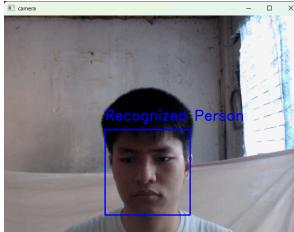
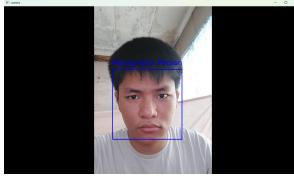
8		Recognized Person	Recognized Person	Matched
9		Recognized Person	Recognized Person	Matched
10		Recognized Person	No Output	Mismatch
11		Unrecognized Person	Recognized Person	Mismatch
12		Unrecognized Person	Recognized Person	Mismatch
13		Recognized Person (Left), Unrecognized Person (Right)	Recognized Person (Left and Right)	Mismatch
14		Unrecognized Person	Recognized Person	Mismatch

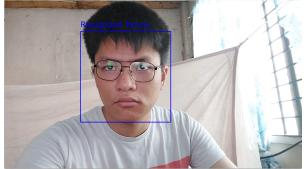
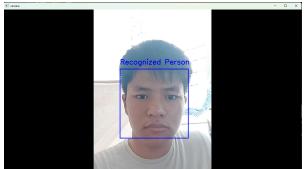
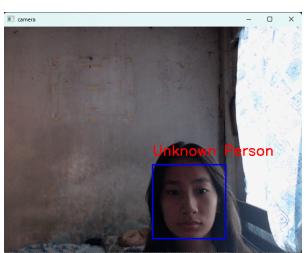
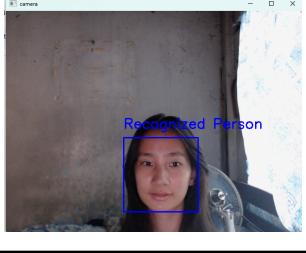
15		Unrecognized Person	Recognized Person	Mismatch
16		Recognized Person (Left), Unrecognized Person (Right)	Recognized Person (Left and Right)	Mismatch
17		Recognized Person (Left), Unrecognized Person (Right)	Recognized Person (Left and Right)	Mismatch
18		Recognized Person (Left), Unrecognized Person (Right)	Recognized Person (Left and Right)	Mismatch
19		Unrecognized Person	Recognized Person	Mismatch
20		Unrecognized Person	Recognized Person	Mismatch
TOTAL				12/20, 0.6

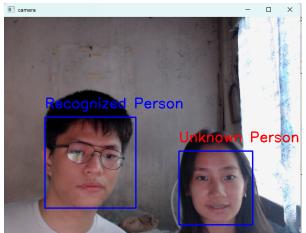
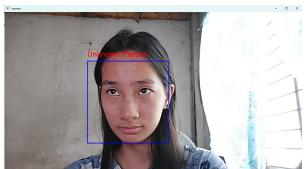
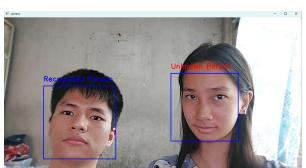
The tests show that the model is struggling to detect my face when I am wearing an eyeglass. The model also failed to detect the unrecognized person, misclassifying it as a recognized person.

Fisher Faces Recognition Model

Trial No.	Image	Expected	Actual Output	Remarks
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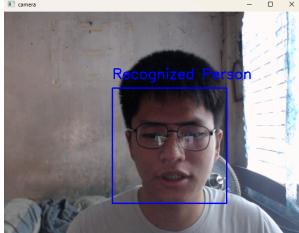
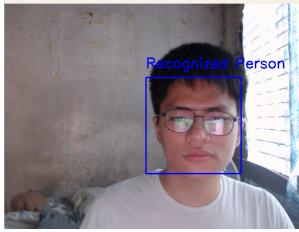
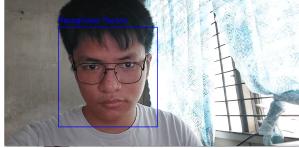
		Output		
1		Recognized Person	Recognized Person	Matched
2		Recognized Person	No Output	Mismatch
3		Recognized Person	Recognized Person	Matched
4		Recognized Person	Recognized Person	Matched
5		Recognized Person	Recognized Person	Matched
6		Recognized Person	Recognized Person	Matched

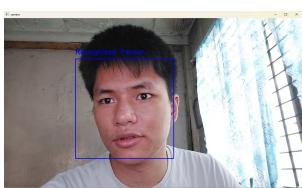
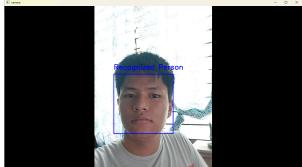
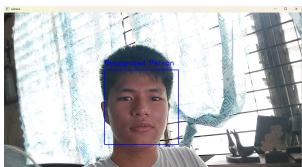
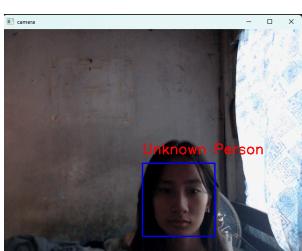
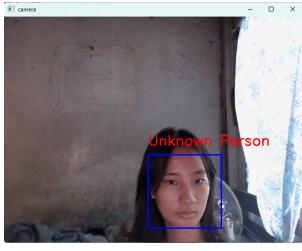
7		Recognized Person	Recognized Person	Matched
8		Recognized Person	Recognized Person	Matched
9		Recognized Person	Recognized Person	Matched
10		Recognized Person	Recognized Person	Matched
11		Unrecognized Person	Unrecognized Person	Matched
12		Unrecognized Person	Recognized Person	Mismatch
13		Unrecognized Person	Unrecognized Person	Matched

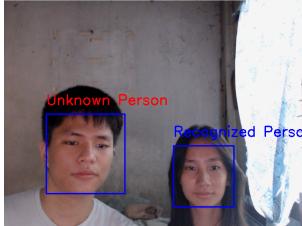
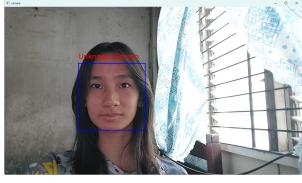
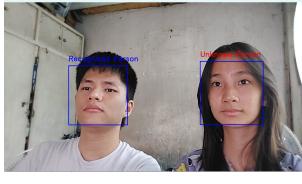
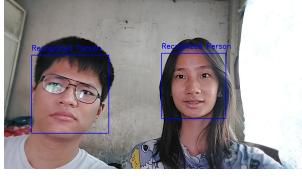
14		Recognized Person (Left), Unrecognized Person (Right)	Recognized Person (Left), Unrecognized Person (Right)	Matched
15		Recognized Person (Left), Unrecognized Person (Right)	Recognized Person (Left), Unrecognized Person (Right)	Matched
16		Unrecognized Person	Unrecognized Person	Matched
17		Unrecognized Person	Unrecognized Person	Matched
18		Recognized Person (Left), Unrecognized Person (Right)	Recognized Person (Left), Unrecognized Person (Right)	Matched
19		Recognized Person (Left), Unrecognized Person (Right)	Recognized Person (Left), Unrecognized Person (Right)	Matched
20		Unrecognized Person	Recognized Person	Mismatched
TOTAL				18/20, 0.9

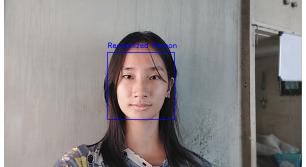
The model still has some problems detecting me with eyeglasses but is generally better. The model also can correctly detect an unknown person, but it sometimes misclassifies it as a known person.

LBPH Faces Recognition Model

Trial No.	Image	Expected Output	Actual Output	Remarks
1		Recognized Person	Recognized Person	Matched
2		Recognized Person	Recognized Person	Matched
3		Recognized Person	Recognized Person	Matched
4		Recognized Person	Recognized Person	Matched
5		Recognized Person	Recognized Person	Matched

6		Recognized Person	Recognized Person	Matched
7		Recognized Person	Recognized Person	Matched
8		Recognized Person	Recognized Person	Matched
9		Recognized Person	Recognized Person	Matched
10		Recognized Person	Recognized Person	Matched
11		Unrecognized Person	Unrecognized Person	Matched
12		Unrecognized Person	Unrecognized Person	Matched

13		Recognized Person (Left), Unrecognized Person (Right)	Recognized Person (Left), Unrecognized Person (Right)	Matched
14		Recognized Person (Left), Unrecognized Person (Right)	Recognized Person (Left), Unrecognized Person (Right)	Matched
15		Unrecognized Person	Recognized Person	Mismatch
16		Unrecognized Person	Unrecognized Person	Matched
17		Recognized Person (Left), Unrecognized Person (Right)	Recognized Person (Left), Unrecognized Person (Right)	Matched
18		Recognized Person (Left), Unrecognized Person (Right)	Recognized Person (Left and Right)	Mismatch
19		Unrecognized Person	Recognized Person	Mismatch

20		Unrecognized Person	Recognized Person	Mismatch
		TOTAL	16/20, 0.8	

This model was able to correctly classify me even with eyeglasses. When classifying myself and an unknown person, it shows a higher misclassification rate of the unknown person as known but better than the Eigenfaces algorithm.