# Pengenalan Wajah dengan Deepface

# **Anggota Kelompok:**

Leni Fitriani - 33221034 Imam Ekowicaksono – 33220306

# **Hasil Ekplorasi**

Berdasarkan ekplorasi pengenalan wajah menggunakan DeepFace menghasilkan output sebagai berikut :

#### Dataset yang digunakan:

• Jumlah Foto di referensi: 33

• Jumlah foto di data tes : 50 (22 known & 28 unknown)

### Tabel Akurasi dan Model yang digunakan

No	Model	Backend	Distance	Akurasi
1.	ArcFace	retinaface	cosine	No. of test data = 50 No. of correct recognition = 39 Accuracy = 78.0 %
2.	VGG-Face	retinaface	cosine	No. of test data = 50 No. of correct recognition = 17 Accuracy = 34.0 %
3.	Facenet	retinaface	cosine	No. of test data = 50 No. of correct recognition = 34 Accuracy = 68.0 %

No	Model	Backend	Distance	Akurasi
4.	Facenet512	retinaface	cosine	No. of test data = 50 No. of correct recognition = 37 Accuracy = 74.0 %
5.	OpenFace	retinaface	cosine	No. of test data = 50 No. of correct recognition = 28 Accuracy = 56.000000000000000000000000000000000000
6.	DeepFace	retinaface	cosine	No. of test data = 50 No. of correct recognition = 12 Accuracy = 24.0 %
7.	DeepID	retinaface	cosine	No. of test data = 50 No. of correct recognition = 26 Accuracy = 52.0 %
8.	Dlib	retinaface	cosine	No. of test data = 50 No. of correct recognition = 26 Accuracy = 52.0 %

## **Kesimpulan:**

Hasil Percobaan menunjukan Model ArcFace dengan Backend Face Detection: RetinaFace dan Distance Metric: Cosine menghasilkan akurasi yang tinggi dibandingan dengan model yang lain dengan parameter yang sama

Note: Untuk Contoh Percobaan dengan Parameter yang lain ada di File Excel Percobaan

### **Hasil Percobaan**



/content/drive/MyDrive/Program/deepfacetask/images/test/leni-fitriani2.png



unknown



/content/drive/MyDrive/Program/deepfacetask/images/test/handoko-supeno3.jpg



'content/drive/MyDrive/Program/deepfacetask/images/referensi/varuliantor-dear.jpg



/content/drive/MyDrive/Program/deepfacetask/images/test/dewi-tresnawati2.jpg



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/content/drive/MyDrive/Program/deepfacetask/images/test/riza-ibnu2.jpg



unknown



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unknown



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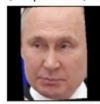
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unknown



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unknown



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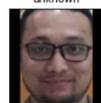
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unknown



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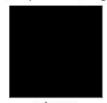


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unknown



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#### Recognition List dan Akurasi serta Nilai Kebenarannya

- 1. leni-fitriani2.png, leni-fitriani.jpg, 0.22450903358704088, leni, True
- 2. unknown-lena.jpeg, -, 1000, unknown, True
- 3. unknown-ridwan-kamil.jpg, varuliantor-dear.jpg, 0.5161593193947438, varuliantor, False
- 4. handoko-supeno3.jpg, handoko-supeno2.jpg, 0.5172503861010826, handoko, True
- 5. unknown-junaedi.png, varuliantor-dear.jpg, 0.5774610513228389, unknown, True

- 6. imam-ekowicaksono3.jpg, sartono-arief.jpg, 0.5636180970109939, unknown, False
- 7. dewi-tresnawati2.jpg, dewi-tresnawati.jpg, 0.31190735439665773, dewi, True
- 8. rahman-indra4.jpeg, varuliantor-dear.jpg, 0.5754758598025361, unknown, False
- 9. unknown-sby.png, handoko-supeno2.jpg, 0.6301080229664879, unknown, True
- 10. unknown-hasanudin.png, reza-budiawan.jpg, 0.5940618103401316, unknown, True
- 11. adiyasa-nurfalah3.jpeg, baud-prananto.jpg, 0.6093676872802738, unknown, False
- 12. unknown-wisnu.jfif, handoko-supeno2.jpg, 0.6618361908595981, unknown, True
- 13. meza-silvana3.jfif, meza-silvana.jpg, 0.27977023170030346, meza, True
- 14. baud-prananto2.jfif, baud-prananto.jpg, 0.39971657809766914, baud, True
- 15. unknown-putin.jpeg, -, 1000, unknown, True
- 16. riza-ibnu2.jpg, riza-ibnu.jpg, 0.24680973812804852, riza, True
- 17. unknown-galgadot2.jpg, -, 1000, unknown, True
- 18. riyanto-riyanto3.jpeg, baud-prananto.jpg, 0.6390715961533979, unknown, False
- 19. hartanto-tantriawan2.jpg, hartanto-tantriawan.jpg, 0.5022805615267053, hartanto, True
- 20. unknown-gozali.jpg, yulrio-brianorman.jpg, 0.6456608259518453, unknown, True

- 21. unknown-revalina2.jpeg, -, 1000, unknown, True
- 22. riyanto-riyanto2.jpeg, handoko-supeno.jpg, 0.6555748191132102, unknown, False
- 23. rahman-indra3.jpeg, handoko-supeno.jpg, 0.5277063127912653, handoko, False
- 24. mina-ismu2.jpg, mina-ismu.jpg, 0.31353389825635614, mina, True
- 25. unknown-bambang.png, handoko-supeno.jpg, 0.57525050258047, unknown, True
- 26. unknown-singgih.png, sulthoni-ashiddiiqi.jpg, 0.6573016427270664, unknown, True
- 27. luky-ramdani3.jpg, reza-budiawan.jpg, 0.638772098750509, unknown, False
- 28. unknown-sandiaga-uno.jpg, -, 1000, unknown, True
- 29. unknown-airin.jpg, leni-fitriani.jpg, 0.6162102992933198, unknown, True
- 30. unknown-galgadot.jpg, -, 1000, unknown, True
- 31. unknown-airin2.png, -, 1000, unknown, True
- 32. meredita-susanty2.jpg, meredita-susanty.jpg, 0.255136102706916, meredita, True
- 33. lathifah-arief3.jpeg, lathifah-arief2.jpg, 0.6122549976175189, unknown, False
- 34. reza-budiawan2.jpg, reza-budiawan.jpg, 0.3136158416344257, reza, True
- 35. sartono-arief2.jpg, riza-ibnu.jpg, 0.5565421176767913, unknown, False

- 36. unknown-zelensky.jpeg, reza-budiawan.jpg, 0.6407414593634266, unknown, True
- 37. unknown-gozali2.jpeg, imam-ekowicaksono2.jpg, 0.6778900383182309, unknown, True
- 38. unknown-revalina.png, -, 1000, unknown, True
- 39. unknown-silas.jpeg, -, 1000, unknown, True
- 40. adiyasa-nurfalah4.jpg, riza-ibnu.jpg, 0.6426833280045883, unknown, False
- 41. sulthoni-ashiddiiqi2.jpg, sulthoni-ashiddiiqi.jpg, 0.4879417402168398, sulthoni, True
- 42. unknown-claus.jpg, hartanto-tantriawan.jpg, 0.6303049461049842, unknown, True
- 43. unknown-parkshinhye.jpg, -, 1000, unknown, True
- 44. unknown-leeminhoo.jpg, -, 1000, unknown, True
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