



# IMG & PDF OCR WEBUI

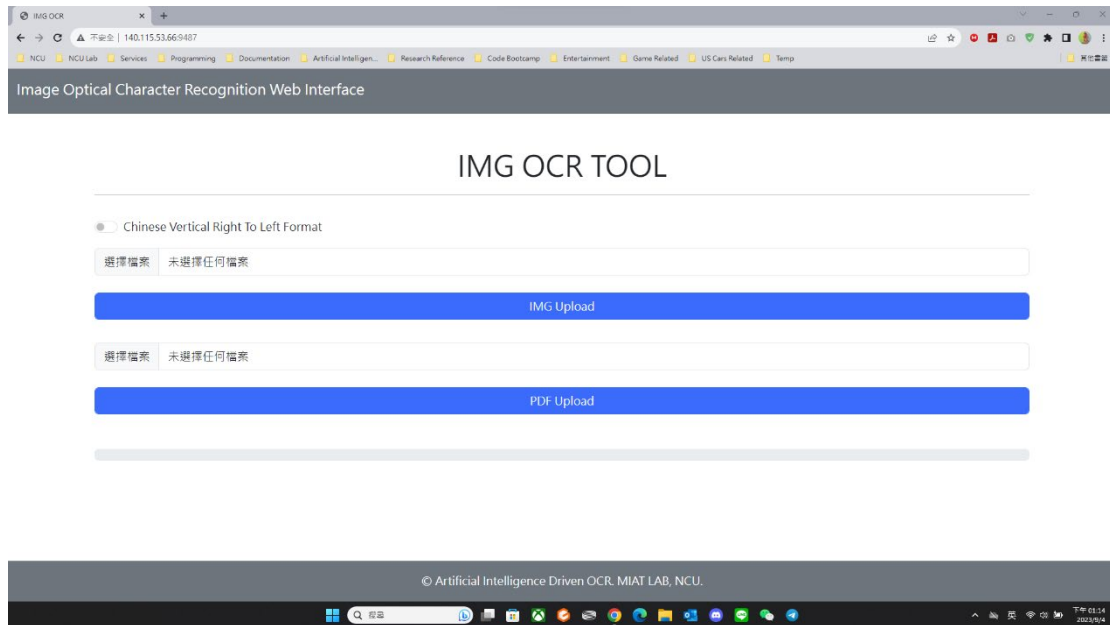
圖文操作手冊

中央大學 MIAT 實驗室

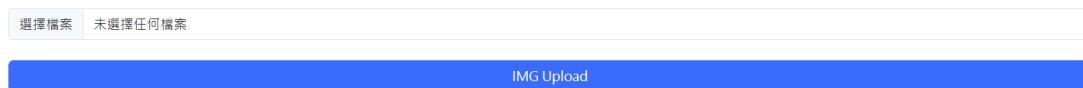
鄧祺文

# 功能入口

## ✧ 功能入口



## ✧ 上半部選擇框：支持 JPG、JPEG、PNG



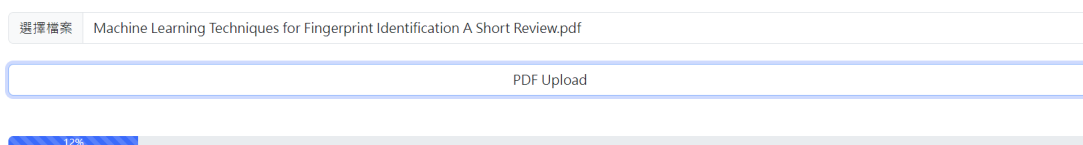
## ✧ 下半部選擇框：支持 PDF



## ✧ 圖像特殊排序：中文直式由右至左（預設標準為由上至下）

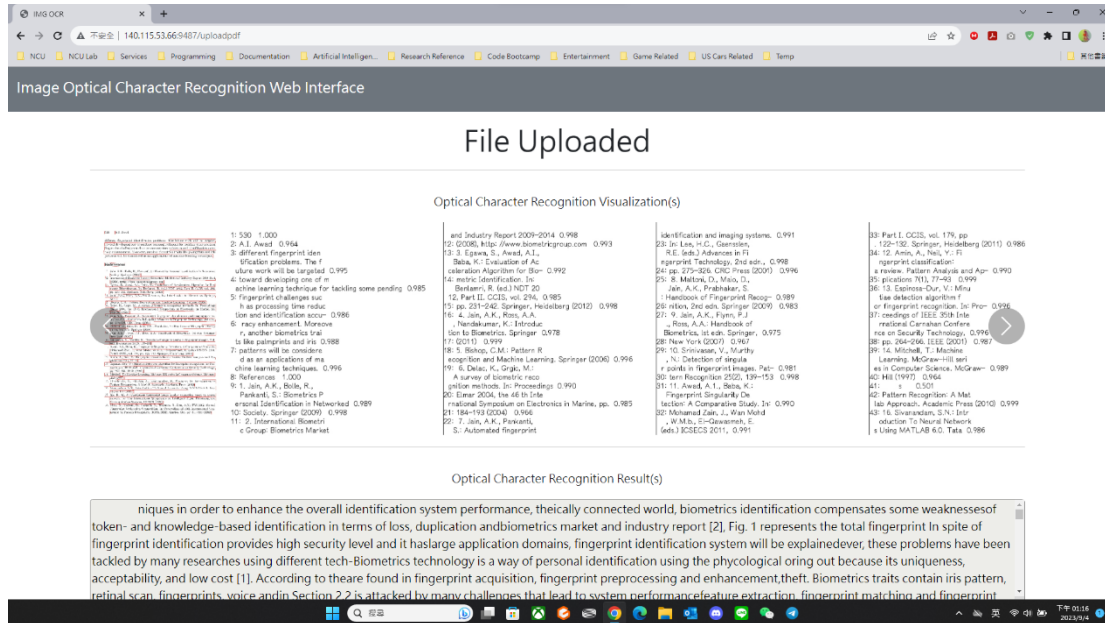
☐ Chinese Vertical Right To Left Format

## ✧ 成功讀取資料後，可於下方看見處理進度條

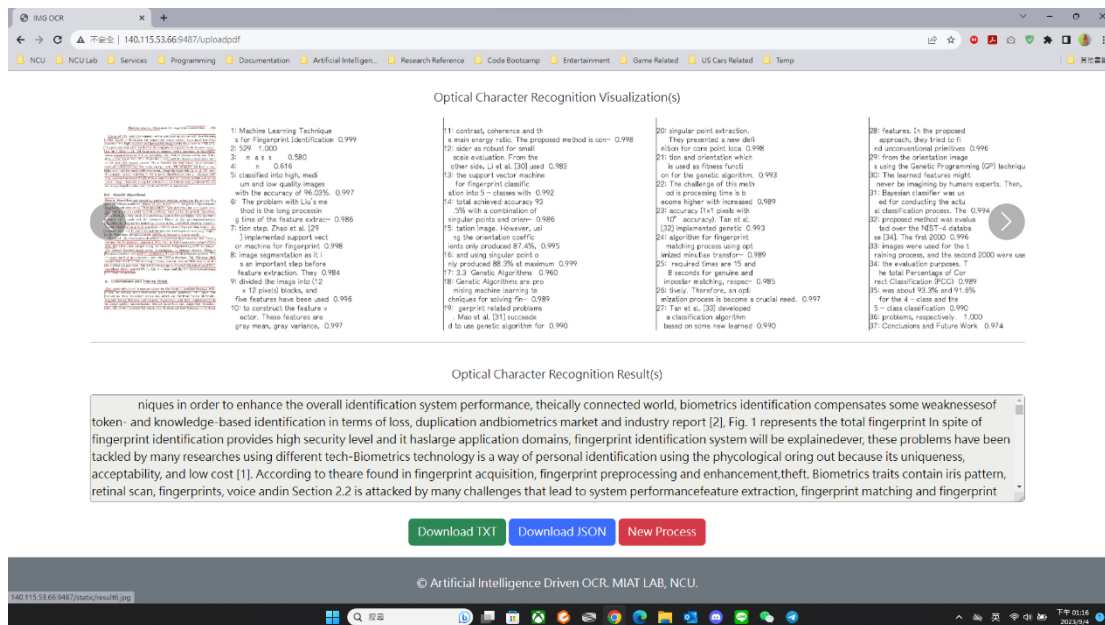


# 結果輸出

## ◇ 結果輸出頁面：上半部



## ◇ 結果輸出頁面：下半部



## ◇ 輸出視覺化：包含辨識框及輸出結果展示，左右按鍵可變換當前展示頁面

- 1: 590, 1,000
- 2: A.I. Awad, 0.964
- 3: Different fingerprint skin ridges classification. The future work will be targeted 0.995
- 4: Developing two sets of active learning classifiers for tackling some pending 0.985
- 5: Fingerprint challenges such as processing time reduction and localization accuracy 0.986
- 6: Fuzzy enhancement, Morozov et al., biometric traits for fingerprint classification and verification 0.988
- 7: Patterns will be considered as an application of machine learning techniques 0.996
- 8: References 1,000
- 9: J. Park, A.K., Bolla, R., J. Park, S.: Biometric Personal Identification in Networked 0.989
- 10: Society, Springer (2009) 0.998
- 11: 2. International Biometric Group: Biometric Market and Industry Report 2009-2014 0.998
- 12: (2008), <http://www.biometricgroup.com> 0.993
- 13: S. Egey, S., Awad, A.I., Bata, K.: Evaluation of the metric Identification for Bio- 0.992
- 14: mation Identification In: Berman, R. (ed.) NDI '20 12, Part II, CCIS, vol. 274, 0.985
- 15: pp. 231-242, Springer, Heidelberg (2012) 0.998
- 16: 4. J. A.K., Ross, A., Nandakumar, K.: Introduction to Biometrics, Springer 0.978
- 17: (2010) 0.999
- 18: S. Bishop, C.M.: Pattern Recognition and Machine Learning, Springer (2006) 0.996
- 19: S. Datta, C., Gope, M.: A survey of biometric recognition methods. In: Proceedings 0.990
- 20: Elmer 2004, the 46th International Symposium on Electronics in Marine, pp. 0.985
- 21: 184-193 (2004) 0.966
- 22: J. A.K., Park, S., Automated Fingerprint Identification and Imaging systems, 0.991
- 23: In: Lee, H., Gaenssen, R.E. (eds.) Advances in Fingerprint Technology, 2nd edn., 0.998
- 24: pp. 27-326, CRC Press (2001) 0.996
- 25: R. Matsuoto, D. Maso, D., J. A.K., Prabhakar, S.: Handbook of Fingerprint Recognition, 2nd edn, vol. 2, edn. Springer (2009) 0.983
- 26: 7. J. A.K., Fynn, P.J., Ross, A.A.: Handbook of Biometrics, 1st edn. Springer, 0.975
- 27: New York (2007) 0.990
- 28: N. Srinivasan, V., Murthy, M.: Detection of singular points in fingerprint images. Pat. 0.981
- 29: 10, Patent Recognition 252, 139-153 0.998
- 30: A.K., Bata, K.: Fingerprint Singularly Detection: A Comparative Study, In: 0.990
- 31: Mohamed Jan, J., Wan Mohd W.M.M., El-Gawassan, E. (eds.) TCSECS 2011, 0.991
- 32: Part I, CCIS, vol. 179, pp. 12-122, Springer, Heidelberg (2011) 0.988
- 33: Y. Ann, A., Nal, Y.: Fingerprint classification: a review, Pattern Analysis and Appr. 0.990
- 34: pp. 103-108, 7(1), 77-93 0.996
- 35: S. Espinosa-Du, V.: A new face detection algorithm for fingerprint recognition, In: Proc. 0.990
- 36: 7th meeting of IEEE 2004, International Caribbean Conference on Security Technology, 0.996
- 37: pp. 264-266, IEEE (2007) 0.987
- 38: 14. Mitchell, T.: Machine Learning, McGraw-Hill series in Computer Science, McGraw-Hill 0.989
- 39: 40: (1997) 0.964
- 41: S. 0.501
- 42: Patterns Recognition: A Mathematical Approach, Academic Press (2002) 0.999
- 43: 16. Sivaraman, S.N.: Introduction to Neural Networks using MATLAB & Java, Tata 0.986

The screenshot shows a web browser window with the address bar displaying a URL. The main content area is titled 'Optical Character Recognition Web Interface'. A large 'File Uploaded' message is prominently displayed. Below this, a table titled 'Optical Character Recognition Visualizations' is shown. The table has four columns. The first column contains a diagram of a machine learning pipeline. The second column lists various machine learning techniques and their performance metrics. The third column lists various machine learning models and their performance metrics. The fourth column lists various machine learning models and their performance metrics.

Optical Character Recognition Visualizations	Optical Character Recognition Visualizations	Optical Character Recognition Visualizations	Optical Character Recognition Visualizations
1. Machine Learning Techniques 1.1 For fingerprint identification: 0.987 2. 727, 0.999 3. Feature: 0.999 4. Fingerprint: 0.999 5. PreProcess: 0.904 6. Classification: 0.999 7. Acquisition: 0.995 8. Extraction: 1.000 9. Index: 0.784 10. Matching: 0.999 11. Database: 1.000 12. Identification: 0.994 13. Separation: 0.999 14. Features: 0.999 15. PreProc: 0.992 16. Classification: 0.990 17. Acquisition: 0.979 18. Extraction: 0.992 19. Fig.3. A forward of fingerprint identification system (basic components) 0.977 20. learning techniques can be good contributors for each	encing the system performance- 0.986 21. machine is recorded in Section 3. 0.994 22. Machine Learning Techniques: 0.994 23. Machine learning systems are concerned with building machine algorithms or techniques 24. In [14], Machine learning system is first trained with source data, and following, 0.980 25. It is used to perform required operations according to its acquired experience, 0.993 26. The problem of machine learning techniques is related to their sensitivity to [2] 0.992 27. the training data and the training parameters as they may produce different 0.994 28. results by changing the learning data. However machine learning includes many 0.989 29. techniques such as Artificial Neural Networks, Support Vector Machine, Genetic 0.999 30. Algorithms, Bayesian Train	ing and Probabilistic Models [15]. We will stress only 0.988 31. on the implementation of the first three techniques on fingerprint identification. 0.973 32. 31. Artificial Neural Networks 33. Artificial Neural Networks is the most widely used algorithm of the machine. 0.987 34. learning system [16]. The quality assurance of the machine is 0.985 35. an important process before the feature extraction. 36. and [17] designed a supervised back propagation neural network that uses the gray scale fingerprint. 0.994 37. image for continuous image quality estimation. The problem of this method 0.991 38. are the lack of evaluation as it has been evaluated for small fingerprint image. 0.991 39. from Fingerprint Verifier	on Competition 2002 (VC2 0.920) [8]. Moreover, the 0.985 40. fingerprint image needs to be divided into blocks which is computationally expensive 0.993 41. permissive process before running the proposed method. Zhu et al. [19] used the 0.995 42. ridge orientation. The corner ridge orientation is estimated using the trained 0.992 43. neural networks. Latent et al. [20] proposed the use of neural network for in- 0.985 44. age quality measurement in colorless fingerprint acquisition. They discovered 0.994

1: Machine Learning Techniques for Fingerprint 0.999  
 2: Identification: A Short Review 0.990  
 3: Ali Ismail Awad1,2 0.952  
 4: 1 Electrical Engineering D  
 epartment, Faculty of Engineering 0.986  
 5: Al Azhar University, Qena, Egypt 0.976  
 6: 2 Member of Scientific Re  
 search Group in Egypt (SRGE) 0.987  
 7: aawad@ieee.org 0.979  
 8: Abstract. Fingerprint is c  
 onsidered as a dominant biometric trait due 0.984  
 9: to its acceptability, reli  
 ability, high security level and low cost. Due 0.995  
 10: to the high demand on fing  
 erprint identification system deployments, 0.991  
 11: a lot of challenges are ke  
 ep arising in each system's phase including fin- 0.987  
 12: gerprint image enhancement  
 t, feature extraction, features matching and 0.991  
 13: fingerprint classification  
 . Machine learning techniques introduce non tra- 0.995  
 14: ditional solutions to the  
 fingerprint identification challenges. This paper 0.985

## ✧ 完整文字輸出：包含所有頁面辨識出之完整文章

Optical Character Recognition Result(s)

niques in order to enhance the overall identification system performance, theically connected world, biometrics identification compensates some weaknesses of token- and knowledge-based identification in terms of loss, duplication and biometrics market and industry report [2], Fig. 1 represents the total fingerprint. In spite of fingerprint identification provides high security level and it has large application domains, fingerprint identification system will be explained. ever, these problems have been tackled by many researches using different tech- Biometrics technology is a way of personal identification using the phycological oring out because its uniqueness, acceptability, and low cost [1]. According to theare found in fingerprint acquisition, fingerprint preprocessing and enhancement, theft. Biometrics traits contain iris pattern, retinal scan, fingerprints, voice and in Section 2.2 is attacked by many challenges that lead to system performance. feature extraction, fingerprint matching and fingerprint

## ✧ 文章打包功能：包含 TXT 文字檔下載、API 串接用 JSON 檔案下載，以及重新開始新一輪識別

Download TXT

Download JSON

New Process