



Reduce Fraud with Automated Signature Verification

AUTOMATION DRIVES EFFICIENCY AND PREVENTS OPERATOR FATIGUE

Identity theft costs Americans a staggering \$24.7 billion in one year alone, and 85% of these theft incidents involved the fraudulent use of an existing account.¹

This isn't a problem unique to the USA. It is a major and ever-growing problem hindering the economic climate across the globe. Banks, insurance companies and financial operations of all businesses that rely on signature authentication know the importance of accuracy when it comes to detecting fraud. Whether check processing, loan origination, applications, or any other legal documentation that require signatures, manually verifying signatures is inherently difficult. The individual intricacies of every signature which will vary each and every time the person signs makes it extremely difficult for the human eye to accurately spot fraudulent signatures.

AUTOMATION DRIVES CLEAR RESULTS

Industries reliant on signature authentication need tools more reliable than the human eye if they are to reduce levels of fraud. Top Image Systems' **eFLOW Signature Verification** enables automated verification for signatures on any type of document with a high degree of accuracy and consistently outperforms similar solutions in customer benchmarks. Using the most advanced

technology, eFLOW Signature Verification is a specialized tool that verifies signatures by comparing them automatically against reference signatures gathered during previous instances, for example during account enrolment and set-up, ongoing work or any other event that allows collection of validated signatures. Additionally, signatures are accepted and compared from any original source, including tablets and handheld devices.

For banks and other businesses that rely on signatures, automating such authorization not only reduces fraud and the associated costs, but significant cost savings also results from the decrease in human interaction with the process as staff involvement is only required in those cases which are flagged as problematic. Business rules can be set up as required by the organization and as relevant for the specific document, such as the number of signatures required to authorize a check or application over a certain value for example.

LEADING THE FIELD

TIS delivers a tool to test signature verification that also establishes thresholds for the confidence of the recognition results while visualizing the verification result through a graphical user interface. eFLOW Signature Verification provides the highest degree of accuracy for any application that needs to verify signatures.

References

1 The Bureau of Justice Statistics (BJS), December 2013.

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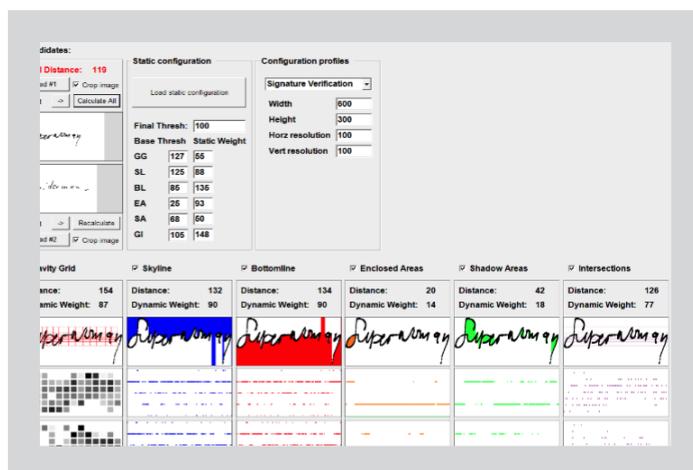
Features Include

✓ MULTIPLE VERIFICATION METHODS

eFLOW Signature Verification combines six verification methods with distinct capabilities to analyze the unique features of the signature. This delivers unprecedented verification accuracy by considering all data extracted from a signature image - including gravity grid, skyline, bottom-line, enclosed areas, shadow areas, and intersections - compared against the still image. The solution can handle various image formats in various resolutions (no minimum resolution required).

✓ MULTIPLE REFERENCE IMAGES

eFLOW Signature Verification uses multiple references to differentiate between natural deviations typical of a genuine signature and deformation digressions that indicate fraud. Our leading edge software detects stable distinctive characteristics during the verification process and ignores random distortions and variations inherent in genuine signatures, providing market-leading low false positive rates. Due to voting, an internal scoring system and the setup tool for "Automatic Thresholding" - False Positive rates are very low.



✓ AUTOMATED SIGNATURE LOCATION

Automatically locate one or more signatures on check images and documents, verifying and matching against existing examples.

✓ BACKGROUND AND NOISE

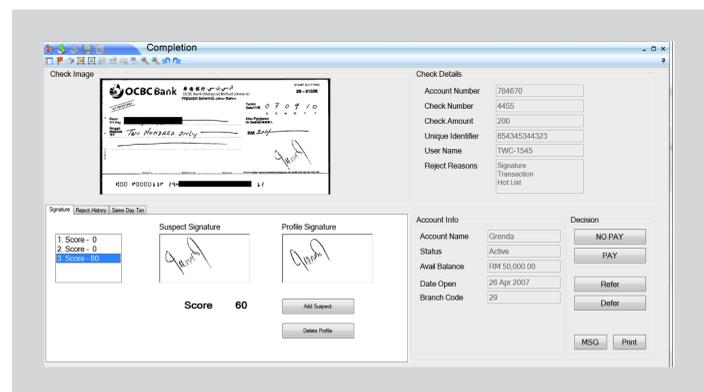
Advanced capabilities eliminate background and remove 'noise' from check images and signature snippets cut from documents with diverse and unpredictable layouts. eFLOW Signature Verification efficiently removes lines, pre-printed text, intrusions from other fields, stamps and other undesired elements surrounding the signature to ensure a clean image and the most accurate reading possible.

✓ QUICK RESPONSE TIME

The solution is extremely agile and can be scaled up to millions of signature comparisons per day. It does not need to store the whole image in a database but rather the features of each signature, which requires less storage and results in faster response time.

✓ DIVERSE OUTPUT OPTIONS

Use confidence values as a basis for making decisions about signature genuineness and drawing conclusions about probable fraud type. Organizations can set a confidence value as a threshold depending on the percentage of false positives versus the percentage of false negatives required by a specific application. The same technology can be used for logo verification or stamp verification.



IMPLEMENT STANDALONE OR AS A FUNCTIONAL ADD-ON

eFLOW Signature Verification can easily be used to feed into existing legacy systems via an SDK. However, eFLOW Signature Verification is most powerful when used to enhance the eFLOW platform for full intelligent document recognition and field data extraction. TIS' eFLOW5 is an award-winning advanced data capture platform that enables flexible recognition workflow for automated signature verification with the ability to create validations and rules based on your business. Leveraging the strengths of the integrated eFLOW platform means businesses benefit from the lowest failure rates on the market, completely streamlined processes and competitive pricing as part of the entire eFLOW product suite.

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