



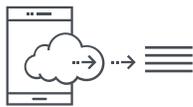
Artificial Intelligence

How Big Data and AI are Fighting Online Fraud

At Jumio, we leverage the power and insights from almost 200 million verifications to develop and train robust machine learning models.

Jumio's Montreal-based AI Labs is developing deep learning models to dramatically improve identity verification accuracy and verification speed. AI has already been productionalized to reduce the time it takes to verify an ID document or an online identity which, in turn, is helping Jumio's customers reduce their abandonment rates and increase new account conversions.

Jumio Uses AI in Three Important Ways



Data Extraction

Jumio uses deep learning models to extract key data from ID documents, leveraging various technologies from face detection to OCR. Jumio's scale means we can recognize specific ID documents and precisely structure the extracted data under a wide range of image-capturing conditions.



Fraud Detection

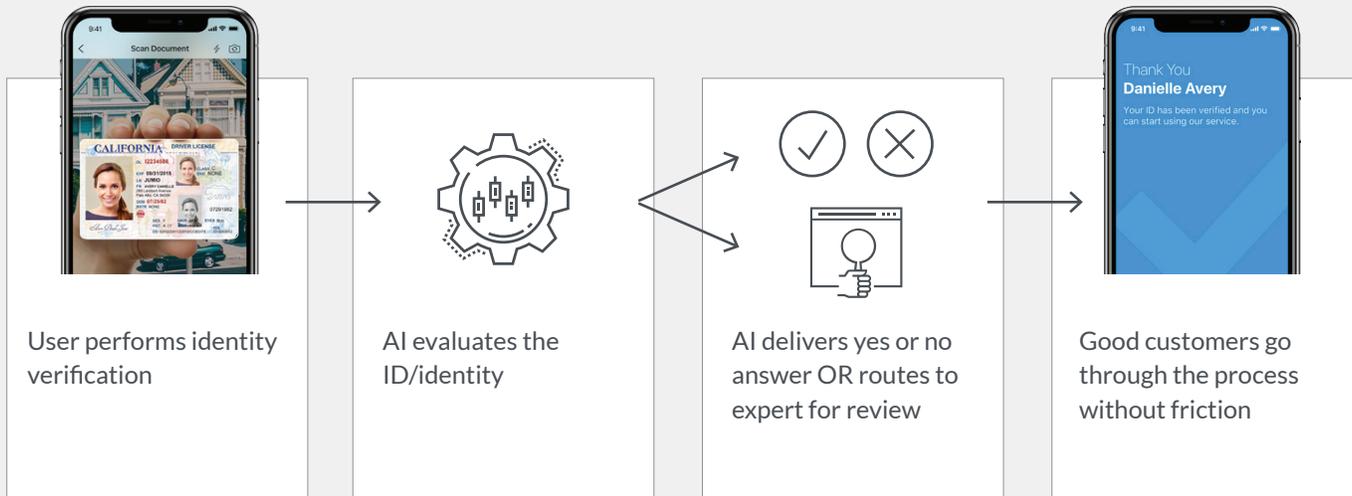
Deep learning helps us understand the unique fonts, pictures and security features of thousands of government-issued ID types, making it easier to spot characteristics of fraudulent IDs. If an ID document has been manipulated or changed and does not conform to the pattern, our deep learning algorithms flag it for closer review.



Risk Scoring

Jumio leverages machine learning to assign risk levels based on known risk factors. Riskier transactions are subject to augmented intelligence (human-in-the-loop via trained verification experts). With this approach, we found that 1% of ID documents that meet our risk scoring threshold account for 15% of known fraud.

How AI Works with Identity Verification



The AI-Powered Identity Verification Leader



Big Data

Jumio has verified close to 200 million identities, which means we have deep experience reviewing large volumes of government-issued IDs from across the globe. This is key to training robust algorithms and accurately extracting and structuring the data, as well as spotting manipulation.



Augmented Intelligence

To better inform the algorithms, there needs to be a continuous feedback loop to incorporate the judgment of our verification experts. Jumio leverages verification experts to review and refine our algorithms which speeds up the learning curve.



AI Engineers

Jumio created AI Labs to boost the development of machine learning models, develop best practices and to continue as a platform of innovation.



Experience

Jumio has been developing our AI models by intelligently tagging valid and invalid ID documents over the last five years. This experience and our global scale enable us to more accurately recognize fraudulent IDs in seconds.