PerceptionMatrix (Patent #15/128, 150)

How it works

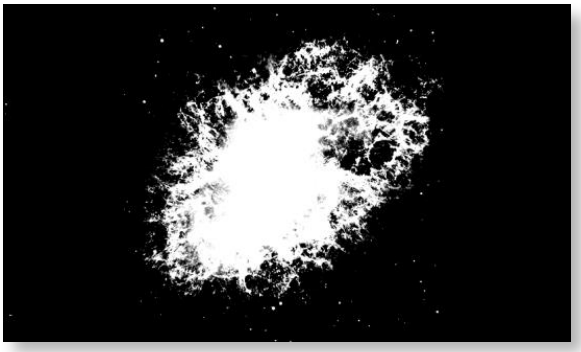
In contrast to conventional OCR techniques for generating transcriptions, PLANET AI's technology produces a PerceptionMatrix as the outcome by processing input sequentially. This abstract metadata format retains content probabilities in a highly memory-efficient manner, regardless of whether the input is text, speech, or images.

Holistic approach

Unparalleled accuracy

Patented technology

PLANET AI's patented PerceptionMatrix offers numerous benefits, allowing for deep content analysis and diverse applications, such as **full-text transcriptions** using downstream language models, **content searches** using keywords or regular expressions, and complex tasks like **automatic document classification and data extraction**.



Conventional OCR methods with high data loss

Content representation without loss of data (PerceptionMatrix)

Excelling where other cognitive systems fail

The primary advantage of this approach becomes evident, particularly when dealing with uncertain input like poor-quality scans or handwritten documents. Traditional OCR methods with fixed transcriptions often lead to substantial information loss, making subsequent tasks challenging and resulting in manual efforts for validation and correction.

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PLANET AI's technology effectively solves this problem.

The PerceptionMatrix is generated in a language-independent manner and can be integrated into PDF outputs or exported to databases. This patented technology (#15/128, 150) provides a significant competitive edge, reflecting in the performance of PLANET AI's Intelligent Document Analysis software suite.

Winner of multiple research awards

PLANET AI's fruitful and long-term collaboration with the CITlab team at the University of Rostock has yielded numerous successes in international competitions and conventions.

Three won competitions at ICDAR 2017
(Information Extraction and Layout Analysis of Historical Documents)

PLANET AI is a research-driven company that develops AI applications with human-inspired cognitive capabilities, enabling customers to unlock and process information from unstructured documents, automate data capture, and achieve the most accurate results.