## Microsoft Azure Cognitive Services Video Indexer API

# MACHINE LEARNING, COGNITIVE SERVICES AND THE VIDEO INDEXER SERVICE



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#### Overview



Machine Learning and Azure Cognitive Services

**Video Indexer Features** 

**Video Indexer Architecture** 

**Demo: Video Indexer Features** 

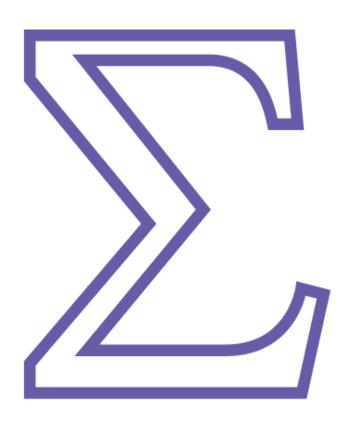
# Machine Learning and Azure Cognitive Services

#### Artificial Intelligence & Machine Learning



**Specialized Field** 

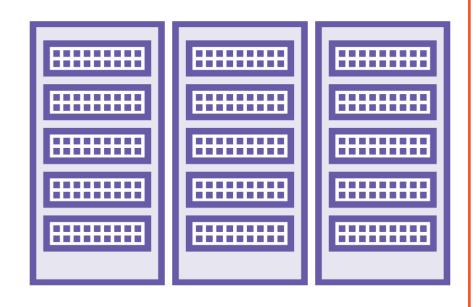
#### Artificial Intelligence & Machine Learning



**Specialized Field** 

**Complex Algorithms** 

#### Artificial Intelligence & Machine Learning



**Specialized Field** 

**Complex Algorithms** 

**Extensive Processing** 

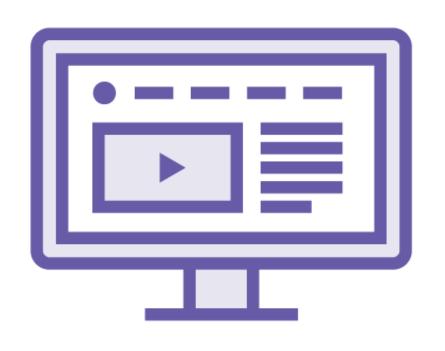


**Pre-Defined Services** 



**Pre-Defined Services** 

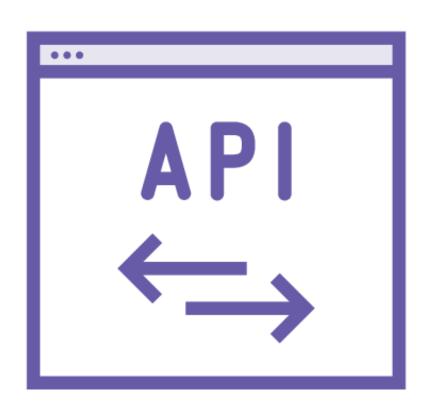
**Cloud-Hosted Resource** 



**Pre-Defined Services** 

**Cloud-Hosted Resource** 

**Self-Service** 



**Pre-Defined Services** 

**Cloud-Hosted Resource** 

**Self-Service** 

**Access through APIs** 



**Pre-Defined Services** 

**Cloud-Hosted Resource** 

**Self-Service** 

**Access through APIs** 

Billing based on Consumption

#### Microsoft Azure Cognitive Services



#### **Microsoft Azure Cognitive Services**



LUIS



Recommendations



Speech



**Emotion** 



Text Analysis



Web Language



Computer Vision



Video Indexer

#### Video Indexer Features



Face detection & celebrity identification



Face detection & celebrity identification

Visual text recognition



Face detection & celebrity identification

Visual text recognition

Visual content moderation



Face detection & celebrity identification

Visual text recognition

Visual content moderation

Label identification



Face detection & celebrity identification

Visual text recognition

Visual content moderation

Label identification

**Shot detection** 



Face detection & celebrity identification

Visual text recognition

Visual content moderation

Label identification

**Shot detection** 

**Keyframe extraction** 

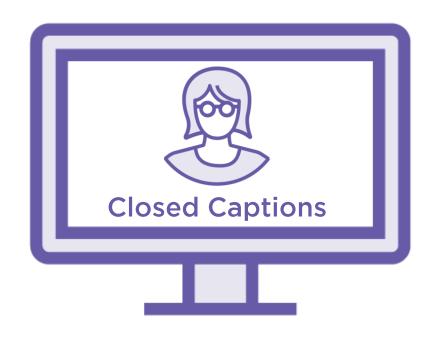


**Automatic language detection** 



**Automatic language detection** 

Audio transcription with customization



Automatic language detection

Audio transcription with customization

Closed captioning



**Automatic language detection** 

Audio transcription with customization

**Closed captioning** 

**Noise reduction** 



**Automatic language detection** 

Audio transcription with customization

**Closed captioning** 

**Noise reduction** 

**Speaker enumeration & statistics** 



**Automatic language detection** 

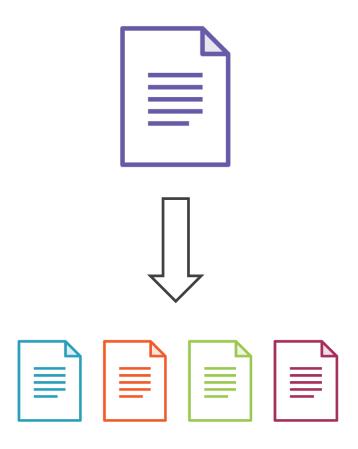
Audio transcription with customization

**Closed captioning** 

**Noise reduction** 

Speaker enumeration & statistics

**Emotion detection** 



**Automatic language detection** 

Audio transcription with customization

**Closed captioning** 

**Noise reduction** 

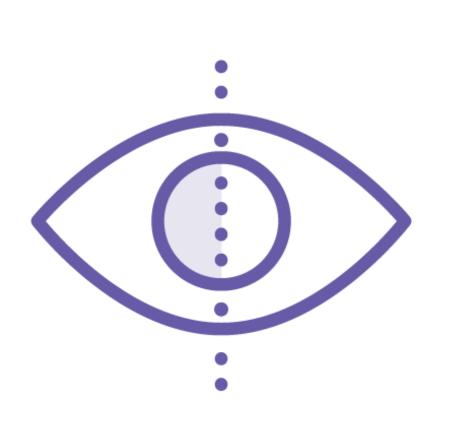
Speaker enumeration & statistics

**Emotion detection** 

**Transcript translation** 

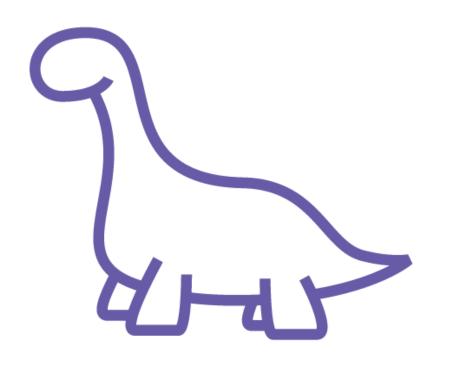


**Keyword extraction** 



**Keyword extraction** 

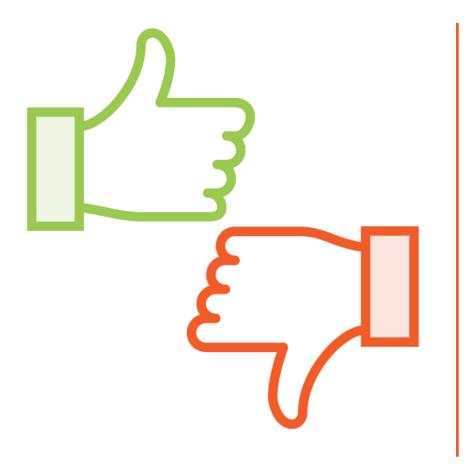
**Brands extraction** 



**Keyword extraction** 

**Brands extraction** 

**Topics inference** 



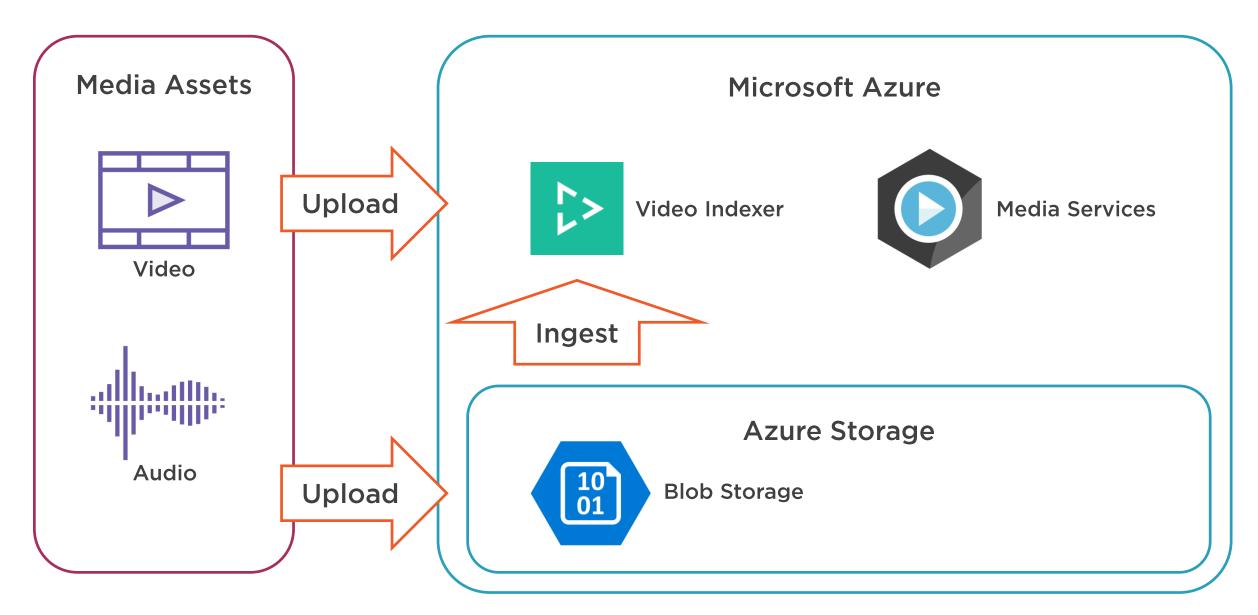
**Keyword extraction** 

**Brands extraction** 

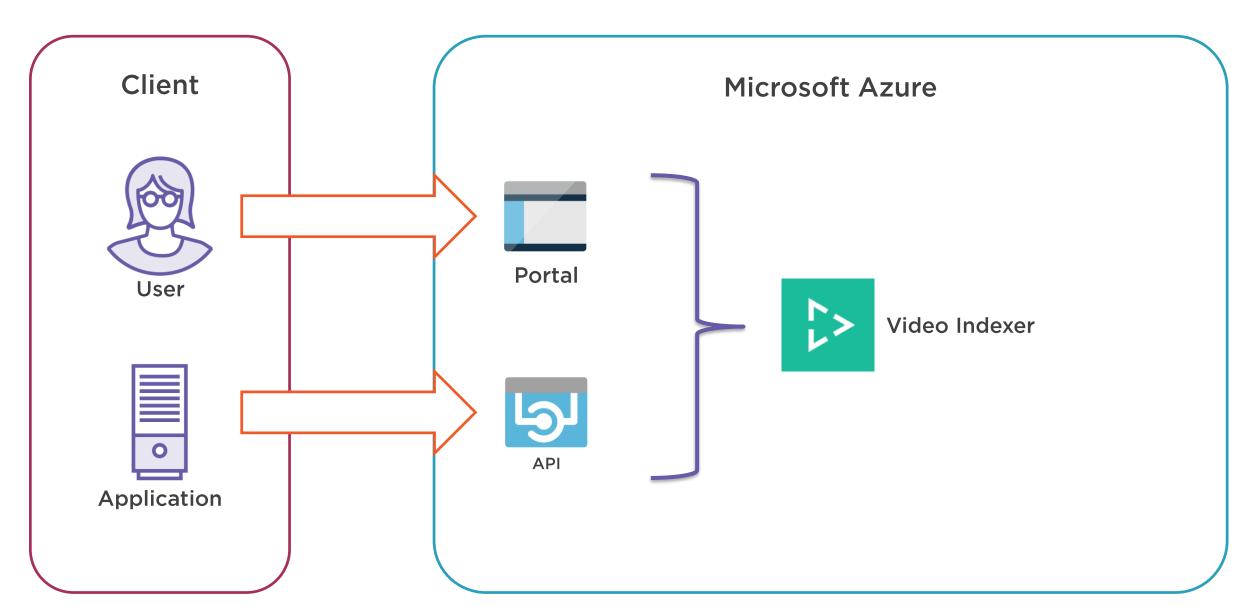
**Topics inference** 

Sentiment analysis

#### Video Indexer Architecture



#### Video Indexer API



#### Demo



#### **Video Indexer Features**

- Indexing Media Content
- Searching Content
- Celebrity Detection
- Face Recognition

#### Summary



Artificial intelligence and machine learning are specialized and complex subjects

Microsoft Azure provinces Al as a service

A range of cognitive services are available

The Video Indexer service provides features for video and audio analysis

Clients can access the service through a portal or API