**Microsoft**
- Distill actionable information from images, generate captions and identify objects in images.
- Recognize emotions in images
- Detect, identify, analyze, organize, and tag faces in photos
- Intelligent video processing produces stable video output, detects motion, creates intelligent thumbnails, and detects and tracks faces.
- Convert audio to text, understand intent, and convert text back to speech for natural responsiveness.
- Identify individual speakers or use speech as a means of authentication with the Speaker Recognition API.
- Understand language contextually, so your app communicates with people in the way they speak.
- Simplify complex language concepts and parse text with the Linguistic Analysis API.
- Automate a variety of standard natural language processing tasks using state-of-the-art language modeling APIs.
- Power your app’s data links with named entity recognition and disambiguation.
- Translate speech and text with a simple REST API call.
- Detect sentiment, key phrases, topics, and language from your text.
- Distill information into conversational, easy-to-navigate answers.
- Enable interactive search experiences over structured data via natural language inputs.
- Provide personalized product recommendations for your customer and improve sales in your store.
- Tap into the wealth of academic content in the Microsoft Academic Graph using the Academic Knowledge API.
- Web, image, video, news and autosuggest capabilities to search the web and return results.
- Build and connect intelligent bots that interact with your users using text/sms, Skype, Teams, Slack, Office 365 mail, Twitter, and other popular services.
- Make better choices to best meet multiple conflicting goals.
- Neural Network Toolkits
- Convert PDF, Word, or HTML documents into HTML, Plain Text, or JSON Answer Units for quick searches.
- Uncover a deeper understanding of people’s personality characteristics, needs, and values to drive personalization.

**IBM**
- Computer Vision API
- Emotions API
- Face API
- Video API
- Bing Speech API + LUIS
- Speaker Recognition API
- LUIS
- Linguistic Analysis API
- Web Language Model
- Entity Linking API
- Translate + Bing Speech API
- Text Analytics API
- QnA Maker
- Knowledge Exploration (structured data)
- Recommendations API
- Academic Knowledge API
- Search APIs
- Bot Framework + Cognitive APIs
- Cognitive Toolkit (formerly, CNTK)
- Azure Search
- Recommendations API

**Google**
- Visual Recognition
- Vision API
- Rekognition
- Speech API
- Natural Language API
- Alchemy Language API
- Tone Analyzer
- Discovery (structured & unstructured data)
- Recommendations API
- Language Translator (9-Voice, 60-Text)
- Speech API (80-Voice, 104-Text)
- Natural Language API
- Personality Insights
- API.AI
- Lex + Polly + Manual Integration
- TensorFlow
- Elastic Search
- Elastic Search Service

**Amazon**
- Rekognition
- (indirect sentiment)
- Lex + Polly
- New entrant in this space with limited offerings
- Limited language coverage but greater natural language processing capability due to Alexa market share
- Image sentiment analysis falls short

**Strength**
- Unique analytics capabilities for images, audio and video
- Other differentiators are Knowledge Exploration Service and QnA Maker service
- Distill actionable information from images, generate captions and identify objects in images

**Weakness**
- Greater enterprise mindshare in the areas of bots and natural language processing requirements
- Alchemy Language provides superior text analytics compared to competition
- The acquisition puts Google ahead of competition with better integration coverage and knowledge domains
- Distill actionable information from images, generate captions and identify objects in images
- Image sentiment analysis falls short

**Version 1.0**
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