

Microsoft Cognitive Services – Follow me on the bandwagon!

Microsoft announced the release of their Cognitive Services suite just a bit over two years ago. Yes did you notice? It may surprise you that Microsoft has been offering a suite of artificial intelligence (AI) services for more than two years – I was a little surprised myself! For context, they released it September 2016 – before Trump was elected. Two years is a very long time in technology, which is a bit of a good news, bad news kind of thing. On the bad side, it may feel like we're behind the times and have a lot of catch-up to do, but on the good side, however, it's two years old and had it's had a fair amount of time to mature.

We're in a goldilocks age of AI and It's not too early to ramp up our AI efforts nor is it too early. Now is very good time to turn your attention to this topic. It's hot – but not too hot. A year from now, though, you'll find yourself left out in the cold and no one wants that.

This introduction kicks off a series of articles on Microsoft's Cognitive Services platform. I'll post a new article every two to three weeks through the end of this year and into early 2019. Each article will focus on one of Microsoft's offerings. Each article will be paired with working code that you can review and download from GitHub. This does all depend on my weekend schedule, so the sequence may change a little, but the overall plan is as follows:

- **Chat Bots:** Instant messaging between a human (customer or employee) and program designed to help the user quickly get the information they need via a well-known instant messenger interface. Note – this is not the annoying “press 1 for accounting, press 2 for sales” kind of interface that we all hate so much. Microsoft chat bots provide a number of great UI affordances and back-end language processing capabilities that when used correctly, can provide a joyful experience to your customers and employees.
- **Vision Services:** Write server code that can “see” an image – or video – and extract key information from it. For example, imagine you have a team of buyers who travel the world, attending fashion shows and taking lots and lots (and lots!) of pictures. When the buyers get home, they upload these photos into your vision-enabled application and it automatically categorizes this pictures for them, letting them quickly find The Next Big Thing in fashion with a computerized assist.
- **Speech:** We use speech services by handing off an audio file to the speech analysis server and it sends us back the transcript. We can even train the speech service to learn our lingo and acronyms so that it create ever more accurate transcripts for us.
- **Knowledge:** The knowledge service works best with a bot by analyzing a user's question and matching it up against the best answers it can find on the topic. Think of this as a class FAQ list – but instead of you coming up with every ever question and answer, you upload information about a topic and this service finds the answers to the users' questions.

- **Language:** You might see a “language service” and immediately think – “I can’t wait to translate my latest poem to Arabic!” And you’d be right. But the language service does more than that – it can “read” text and find company names, acronyms, people’s names and even assess the writer’s sentiment. Wouldn’t it be nice if you could programmatically read through all the comments on your products and glean that kind of intelligence? It might and if that would be useful to do in your situation, you can use the Language service to do it.
- **Search:** Google dominates the consumer search market so thoroughly, it’s easy to forget about Bing – but you shouldn’t! Bing is a powerful and useful search engine and Microsoft makes it easy to leverage Bing in your enterprise as service. Consider an HR recruiting scenario – you’re hunting for new staff and found a potential candidate. You write up an introductory email and an Outlook Add-in uses the Search service to search and locate information about the candidate that then allows you to craft a great introduction with a personal touch, increasing your chance of a response.

As you can see, the platform offers a lot today and you can be sure it will offer more over time.

Next up in the series – Chat Bots.