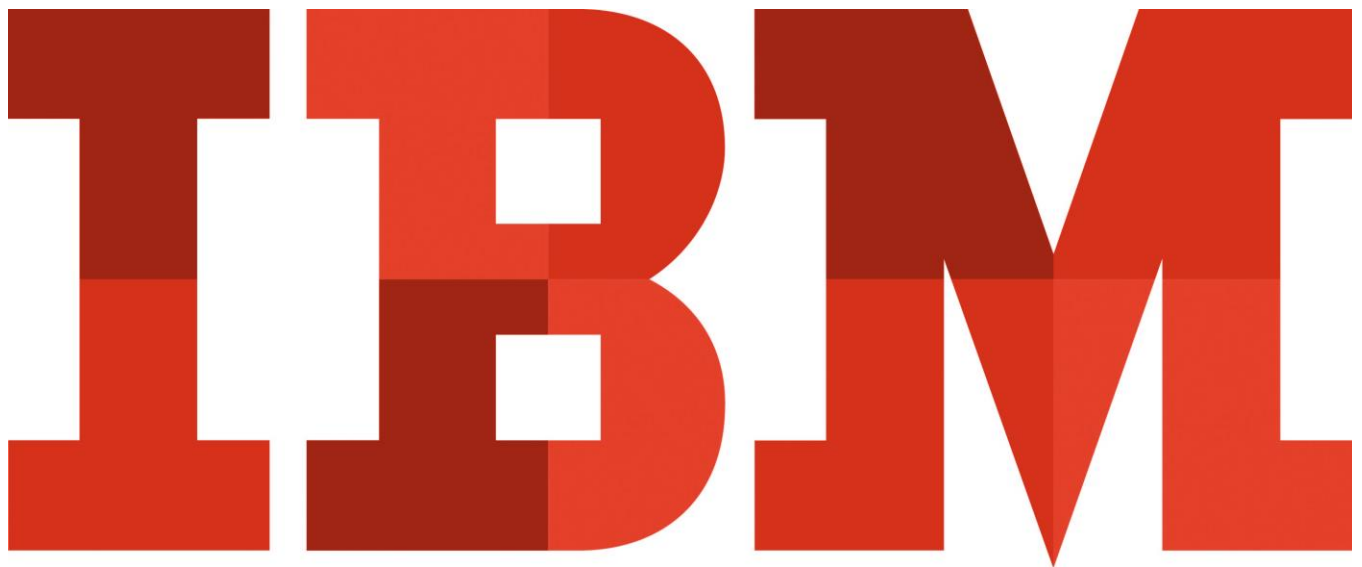


From Watson on Bluemix and Beyond

A guide for developers

Lennart Frantzell alf@us.ibm.com

12/4/2016



A digital copy of this lab and code snippets can be found at:

Quick Introduction

When we attend Hackathons the most popular Bluemix services are the Watson services.

<https://www.ibm.com/watson/developercloud/services-catalog.html>. But there are a large number of Watson services and tools that aren't hosted on Bluemix. And although these enterprise-flavor services and tools may not fit into the tight schedule of a hackathon, they should be known to hackers and non-hackers alike.



The Underlying Technology

- Apache UIMA <http://uima.apache.org/>
- <https://www.research.ibm.com/deepqa/faq.shtml>
- <http://www.cio.com/article/3106770/analytics/open-source-r-extension-simplifies-data-science-with-ibm-watson.html> Open source R extension simplifies data science with IBM Watson
- Watson on GitHub <https://github.com/IBM-Watson>

Step 1: Use the Watson Services on Bluemix

The Watson services on Bluemix are extremely popular at hackathons and beyond. They are easy to learn and to use. And they all come with demos and APIs: <https://www.ibm.com/watson/developercloud/services-catalog.html>

Language

1. **AlchemyLanguage** <https://www.ibm.com/watson/developercloud/alchemy-language.html>
2. **Conversation** <https://www.ibm.com/watson/developercloud/conversation.html>
3. **Dialog** <https://www.ibm.com/watson/developercloud/dialog.html>
4. **Document Conversion** <https://www.ibm.com/watson/developercloud/document-conversion.html>
5. **Language Translator** <https://www.ibm.com/watson/developercloud/language-translator.html>
6. **Natural Language Classifier** <https://www.ibm.com/watson/developercloud/nl-classifier.html>
7. **Personality Insights** <https://www.ibm.com/watson/developercloud/personality-insights.html>
8. **Retrieve and Rank** <https://www.ibm.com/watson/developercloud/retrieve-rank.html>
9. **Tone Analyzer** <https://www.ibm.com/watson/developercloud/tone-analyzer.html>

Speech

1. **Speech to Text** <https://www.ibm.com/watson/developercloud/speech-to-text.html>
2. **Text to Speech** <https://www.ibm.com/watson/developercloud/text-to-speech.html>

Vision

1. Visual Recognition <https://www.ibm.com/watson/developercloud/visual-recognition.html>

Data Insights

2. **AlchemyData News** <https://www.ibm.com/watson/developercloud/alchemy-data-news.html>
3. **Discovery** <https://www.ibm.com/watson/developercloud/discovery.html>
4. **Tradeoff Analytics** <https://www.ibm.com/watson/developercloud/tradeoff-analytics.html>

Embodied Cognition

1. Project Intu <https://www.ibm.com/watson/developercloud/project-intu.html>

Step 2a: Use the Watson Knowledge Studio

Beyond the Watson Services on Bluemix we have the Watson Knowledge studio. A tool that allows developers to “Teach Watson to discover meaningful insights in unstructured text without writing any code”

Free for the first month and starting at \$3,998.00 USD per month per 10 authorized users

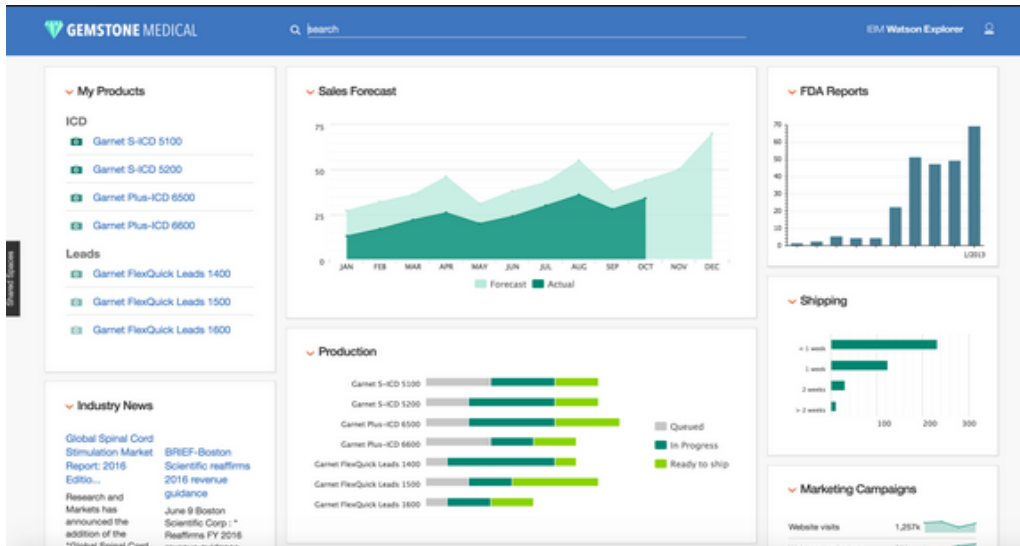


- IBM Watson Knowledge Studio is a cloud-based application that enables developers and domain experts to collaborate and create custom annotator components for unique industries.
 - These annotators can identify mentions and relationships in unstructured data and be easily administered throughout their lifecycle using one common tool. Annotator components can be deployed directly to IBM Watson Explorer, AlchemyLanguage and Watson Discovery Services <https://www.ibm.com/watson/developercloud/doc/discovery/>

<https://www.ibm.com/marketplace/cloud/supervised-machine-learning/us/en-us>

Step 2b: Use the IBM Watson Explorer

<https://www.ibm.com/marketplace/cloud/content-analytics/us/en-us>



- Watson Explorer is a cognitive search and content analysis platform that gives you access to insights from all the data you care about, so you can drive business performance and growth.
- Search and analyze structured, unstructured, internal, external and public content to uncover trends and patterns that improve decision-making, customer service and ROI.
- Leverage built-in machine learning, natural language processing and next-gen APIs to unlock hidden value in ALL your data. Gain a secure 360-degree view of customers, in context, to deliver superior experiences.

Step 3: Use IBM Watson Industries and professions

<http://www.ibm.com/watson/products.html>

Watson Commerce

Illuminate deeper insights to help you truly understand customers.

[Learn more](#)

Watson Education

Transform the learning experience through personalization.

[Learn more](#)

Watson Financial Services

Offer higher value experiences and augment the management of regulatory compliance.

[Learn more](#)

Watson Health

Transform how organizations deliver health and wellness.

[Learn more](#)

Watson IoT
Bring the power of Watson and cognitive computing to the physical world.
[Learn more](#)

Watson Marketing
Deliver harder working, better performing campaigns.
[Learn more](#)

Watson Supply Chain
Help your organization improve day-to-day decisions and actions.
[Learn more](#)

Watson Talent
Enhance how people work and improve their impact on the business.
[Learn more](#)

Watson Work

Transform the digital work place with instant expertise, the right contacts and fast insights.

[Learn more](#)

<http://www.ibm.com/watson/products.html>

IBM Watson Health

Watson Health

Welcome to the cognitive era of health

[Watch Video](#)

[Contact Us](#)

<https://twitter.com/IBMWatsonHealth>

Watson Health has a number of important offerings: <http://www.ibm.com/watson/health/>

- Watson Health for Research Kit <https://www.ibm.com/marketplace/cloud/simplify-crowd-sourced-research-studies/details/us/en-us>

- Watson for Genomics <https://www.ibm.com/watson/health/oncology/genomics/>
- Watson for Oncology <http://www.ibm.com/watson/health/oncology/>
- Population Health Management <https://www.ibm.com/watson/health/population-health-management/>
- Care Management <https://www.ibm.com/watson/health/population-health-management/care-management/>
- Imaging solutions: <http://www.merge.com/>
- Enterprise Imaging solutions: <http://www.merge.com/Solutions.aspx>
- Social Program Management <https://www.ibm.com/watson/health/social-program-management/>
- Watson Health Core <http://watsonhealth.ibm.com/Watson-Health-Core.html>
- Watson for Drug Discovery <http://watsonhealth.ibm.com/Watson-Drug-Discovery.html>
- Watson for Clinical Trial Matching <http://www.ibm.com/watson/clinical-trial-matching.html>
- IBM Watson Health Cloud for Life Sciences Compliance <https://www.ibm.com/marketplace/cloud/cloud-for-regulated-workloads/us/en-us>
- eClinicalOS Electronic Data Capture and Management System <https://pages.eclinicalos.com/>