

Session 7947

think 2018

**Good Things Come in Threes:  
Three Steps, Three Tricks, Three Applications  
to go from Data to Insights**

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think

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# Watson Discovery

Unlock hidden value in data to find answers, monitor trends and surface patterns with the world's most advanced cloud-native **insight engine**.

**Three phrases**  
to describe Discovery

**intelligent**  
**cloud-native**  
**insight engine**





# Three steps from Data to Insights

ingest



enrich



query



# Three AI Differentiators

that set Discovery apart

Embedded NLP

Relevancy Training

Domain Customization





# Three use case patterns enabled by Discovery

Make every employee your best employee

Enable richer chatbot interactions

Know your customer voice



# Super-charging professionals in an organization



## Teacher Advisor

Empower 10000 teachers to easily find lesson planning and instructional guidance resources

#5333

## Intellectual Property Management

Reduce from days to minutes the steps to find evidence of use leading to untapped licensing income

## Watson Regulatory Compliance

Tap over 40 sources of financial regulations to provide the most up-to-date regulatory guidance

#1692

# Enable richer chatbot interactions



## Prudential Assurance

Leading life insurance provider in Asia enhances their askPru chatbot with Watson Discovery

#8402

## Discover Financial

Streamline support using a Discovery enhanced chatbot that serves up the most relevant answers

#7943

## Banking organizations

Enhance customer experience with agent assist solutions

#7945

# Know your customer voice



Max Kelsen

Uncover insights from omni-channel customer feedback to prioritize investments

#3927

Fantasy Football

Power fantasy football predictions with insights from football analysts, injury reports and news content

#2732

Consumer Complaints Insights

Analyze customer issues and concerns in public database from Consumer Financial Protection Bureau

**Three code patterns  
to jumpstart with Discovery**

**search UI**

**cognitive bot**

**knowledge base**



# search UI

IBM Code

CodeContentCommunityOpen Source

TwitterFacebookLinkedInGitHubEmail

Create an app to perform intelligent searches on data

Develop a web app to extract and visualize enriched data using Node.js and Watson Discovery

Get the code

View the demo

8★67

Last updated Mar 05, 2018

By Rich Hagarty

Description

A standard search for a site can return too many results for someone to want to go through. However, it's possible to quickly build out a search interface for your Watson Discovery instance using out-of-the-box UI components that query and manipulate the enriched data to return more relevant search results. This code pattern uses publicly available reviews on Airbnb listings to demonstrate how to use individual UI components to visualize insights. You can then easily switch out the dataset to adapt it to your own use cases.

Technologies

Artificial Intelligence

Node.js

Airbnb Review Data for Ausin, TX

Natural Language Query

Passage Search

Limit to 100 Results

Enter search string...

FilterBy List

Entities

Austin (391)

Flora (46)

Lisa (35)

Christine (71)

Courtney (62)

Jeep (62)

Alexandra (61)

Roman (34)

Alexandra (44)

Quentin (37)

Categories

Concepts

Keywords

Matches

999REVIEWS

969POSITIVE

15NEUTRAL

15NEGATIVE

Highest Score

ENTIRE FLOOR! Business travel & fun

The room is fantastic with nice sight lines from the windows and a very comfortable bed. Alexandra was a great host, welcoming me when I arrived and available if I needed anything but also very discreet and respectful of privacy. The location is a fast a cheap uber ride to downtown. I highly recommend the place.

Score: 1.0000

Date: 2015-03-17

Sentiment: 4.8/5

ENTIRE FLOOR! Business travel & fun

Alexandra welcomed us into her home and gave us a short, yet informative, tour of the area in which we would be staying. The beautifully appointed room (excellent natural light from huge windows!) was complete with coffee and tea, bottled water, and plush towels. The beautiful neighborhood is north of downtown Austin, but a quick walk (~30 min) along Shoal Creek path gets you right into the heart of downtown. It was very convenient to not have a car and stay here. There are plenty of neighborhood places that Alexandra made sure to recommend that we could easily walk to for food and drinks. The photos and description that Alexandra provides are incredibly accurate. You will love staying in her stylish and comfortable room! It felt like we had our own place to stay, not that we were guests in someone's home.

Score: 1.0000

Date: 2015-03-09

Sentiment: 4.8/5

ENTIRE FLOOR! Business travel & fun

My mom and I both loved our stay with Alexandra. The room is spacious and both the queen bed and twin bed on the floor were comfortable. Loved the walk in closet with mini fridge, wall of windows and huge bathroom. Definitely make sure to take a walk around the neighborhood if

Sentiment Chart

Sentiment scores by percentage

Entities

All Terms

100% Positive

0% Neutral

0% Negative

Trending Graph

Avg review scores per month for selected term

Entities

Select Term

<https://developer.ibm.com/code/patterns/create-an-app-to-perform-intelligent-searches-on-data/>

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# cognitive bot

## Create a “cognitive” retail chatbot

### Build a configurable, retail-ready chatbot

[Get the code](#)[View the demo](#)[Watch the Tech Talk](#)

👁 26 ★ 86 💰 114 Last updated Feb 26, 2018 | By Scott D’Angelo, Rich Hagarty, Mark Sturdevant

#### Description

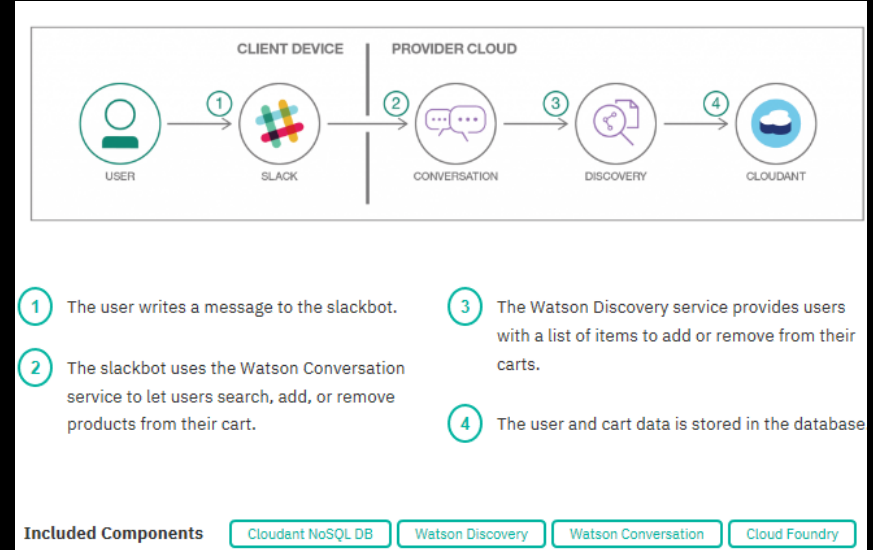
As a Python developer, you can use this pattern to learn how to add features such as a shopping cart, context store, and custom inventory search into your chatbot. When you’ve completed the pattern, you will understand how to create a chatbot dialog using Watson Conversation, a Cloudant NoSQL database, Watson Discovery, and a Slack group.

**Technologies**

Artificial IntelligenceData StorePlatform as a Service

**Industries**

Retail



# knowledge base

Watson<sup>™</sup>

Starter Kits / Knowledge Base Search

Discovery - Knowledge Base Search

This starter kit demonstrates how Watson Discovery's cognitive search capabilities quickly find the most relevant information in your documents to answer your natural language questions. Try out the preset questions or enter a custom question and compare the answers returned by a Standard Search vs. a Passage or Relevancy-Trained Search on the Stack Exchange Travel data set.

[Get Started](#)

[API Reference](#)

[Documentation](#)

[Fork on GitHub](#)

Start free in Bluemix

Passage Search

Relevancy Training

Preset questions

Why don't airlines have backup planes just in case of an emergency?

Is it rude to ask if the food contains pork or alcohol?

How to prevent "Delhi Belly"?

What items are forbidden to take when traveling to the US that would be OK in most other countries?

View all 200+ questions

<https://knowledge-base-search.ng.bluemix.net/>

Preset questions

Why is the food so bad on airplanes?

Is an OysterCard worth it for occasional 1-day visits from outside London?

Any tips for street parking in San Francisco?

Which lane to enter on this roundabout? (UK)

View all 200+ questions

Compare the Standard search to the Passage search on Stack Exchange Travel data.

Standard search

Passage search

Having lived in the city for six years, I believe parking around Union Square is hard but not the worst, thanks to there being several large garages. There's one right under Union Square, <https://www.sfmta.com/getting-around/parking/parking-garages/union-square-garage>. The daily rate of \$36 is better than a parking ticket or a break in while street parking.  
If you get a parking ticket, don't feel bad. You are not alone, and paying your fine contributes to keeping San Francisco a great city :)  
"Is it safe to leave your car on a street for a couple of days?" Not really. Don't leave anything of conceivable value visible. I heard of neighbors' cars being broken into for children's boxes of juice and cookies.

Best advice for street parking might be: don't! - SF has something of a car break-in epidemic, especially in the tourist areas, which includes Union Square and surrounds. Typical article: "Car break-ins are epidemic in San Francisco"  
If it's only a day or so, then a parking garage near Union Square won't break the bank - but do check to ensure that they allow overnight parking.  
You might also want to consider asking desk staff at the hotel ahead of time to see if they have any advice, or if they can recommend a convenient garage.

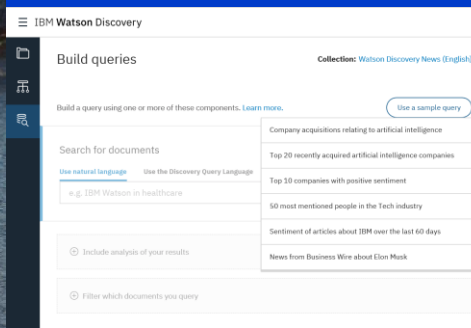
Having lived in the city for six years, I believe parking around Union Square is hard but not the worst, thanks to there being several large garages. There's one right under Union Square, <https://www.sfmta.com/getting-around/parking/parking-garages/union-square-garage>. The daily rate of \$36 is better than a parking ticket or a break in while street parking.  
● If you get a parking ticket, don't feel bad. You are not alone, and paying your fine contributes to keeping San Francisco a great city :)  
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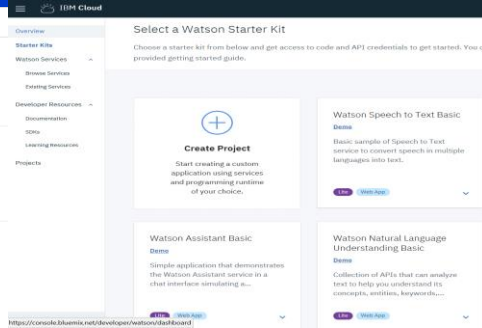
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# Three tricks for building expertise with Discovery

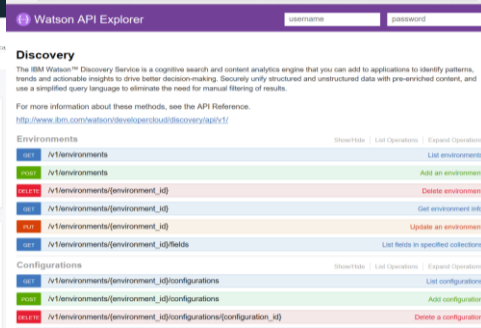
## Query Building with Discovery News



## Starter Kits from Watson Console



## API Explorer



# Three reasons to try Discovery

- **Free to try**
- **See the value in 5 min**
- **Get ahead**



# Three little-known features to power your Discovery experience

- **Visualize your data**
- **Data science at your fingertips**
- **Configure it your way**



#7942

Making the most of Watson  
Discovery in your Enterprise  
Mon 11.30am-12.10pm

## Join us for other sessions on Watson Discovery Portfolio!

Session #	Title	Abstract	Speaker	When & Where
7943	Watson Discovery: Watson's Insight and Reasoning Platform	Put Watson Discovery to work for you! Join us to learn how the world's most advanced cloud-native insight engine uses natural language understanding to unlock meaning and knowledge contained in business documents.	Luke Palamara, Sheng Xu (Discover Financial)	Mandalay Bay South, Level 2 - Lagoon J. Mon, 19-Mar 09:30 AM - 10:10 AM
4722	Beyond Search Engines: New Ways to Discover Information	With the advancement of natural language understanding, Information Retrieval algorithms and conversation building tools, the way we search for information has already started to shift. Join us as we share thoughts and research work on the future of information discovery, leading to new ways to find answers, get results, and even converse with systems to unlock insights.	Shila Ofek-Koifman, Anish Mathur	Mandalay Bay South, Level 2 - Reef D. Mon, 19-Mar 11:30 AM - 12:10 PM
7942	Making the most of Watson Discovery in your Enterprise	Watson Discovery is like a Swiss Army Knife for your enterprise. Join us to fully understand the various features and capabilities held within it to get the most from your investment.	Phil Anderson, Deepika Devarajan	Mandalay Bay South, Level 2 - Lagoon E. Mon, 19-Mar 11:30 AM - 12:10 PM
7946	Democratizing the development of custom NLP models	Simplify and re-design the user experience of IBM Watson Knowledge Studio around non-data scientist users to allow teams of industry subject-matter experts to develop their own solutions. Join us as we showcase client success stories with custom model development and share best practices for faster and affordable model development.	Luke Palamara, Deepika Devarajan, Avinash Asthana	Mandalay Bay South, Level 2 - Lagoon J. Mon, 19-Mar 12:30 PM - 01:10 PM
7945	Conversational Discovery	Chatbots are taking over, but they often lack a depth of knowledge to address a broader range of customer interactions. Join us to extend the capabilities of the common chatbot with Watson Discovery to create more complete and efficient solutions.	Anish Mathur, Mitch Mason	Mandalay Bay South, Level 2 - Lagoon E. Mon, 19-Mar 02:30 PM - 03:10 PM
7944	Watson Knowledge Graph	Knowledge Graphs are starting to appear as the fabric underneath the products of all major companies- Google, LinkedIn, Facebook. Join us to learn what Knowledge graphs mean, what querying capabilities are currently available in our product and what it can enable you to do with your corpus.	Mudita Singhal, Marisa Boston (KPMG)	Mandalay Bay South, Level 2 - Lagoon J. Mon, 19-Mar 04:30 PM - 05:10 PM



# Join us for our Hands on Labs with Watson Discovery Portfolio offerings!

Session #	Title	Abstract	Speaker	When & Where
8613	Teach Watson to understand your data using Watson Knowledge Studio	How do you train Watson to extract information from natural language data that is specific and unique to your data? In this lab, you will learn how to use the newly launched Watson Knowledge Studio on IBM Cloud to create a machine learning model which extracts domain specific data - no prior data science or programming skills needed!	Archana Raghavan, Deepika Devarajan	Mandalay Bay South, Level 2, Oceanside, Think Academy - Lab 5 Tues, 20-Mar 10:30 AM – 12:10 PM
8615	Finding Answers Using Natural Language in Watson Discovery	Advancements in natural language understanding have expanded the possibilities when searching for answers within our own data. In this lab, we will look at how Discovery handles natural language questions, how it finds relevant passages, and how it learns to improve relevance. We will also look at the best ways to combine these with other capabilities of Discovery to create experiences that go beyond simple results and help uncover valuable information for users.	Anish Mathur, Deepika Devarajan	Mandalay Bay South, Level 2, Oceanside, Think Academy - Lab 5 Tues, 20-Mar 2:30 PM – 4:10 PM
8616	Extract insights using natural language processing	Your next breakthrough could be hidden in plain sight! In this lab, learn how to perform advanced text analytics using the Watson Natural Language Understanding service without any data science experience! Find out how to extract concepts, entities, keywords, sentiment, emotion and more in your data by getting hands-on with the service and the APIs to bring these capabilities into your applications.	Ryan Whitnah, Shranith Linga, Deepika Devarajan	Mandalay Bay South, Level 2, Oceanside, Think Academy - Lab 5 Wed, 21-Mar 8:30 AM – 12:10 AM
8614	Discover Watson Discovery	Watson Discovery is a cloud-native insight engine proven to uncover value in your data by finding answers, surfacing patterns and tracking trends. In this lab, learn how to set up your Watson Discovery instance to ingest, enrich and query natural language data using Discovery tooling and APIs. You will also learn to build out queries on pre-enriched news content readily available within the service that can be included within your first discovery app. Finally get caught up on the latest out-of-the-box AI capabilities that were recently released.	Phil Anderson, Deepika Devarajan	Mandalay Bay South, Level 2, Oceanside, Think Academy - Lab 1 Wed, 21-Mar 10:30 AM – 12:10 PM

