

Professional Staffing & Recruitment Services A Case Study

Introduction

r/ally is a ground breaking new solution for helping people to find "Who Knows What" in an enterprise's organization. It is a cloud based application which uses natural language input - from the r/ally mobile application or from a desktop - that interacts with r/ally's machine learning engine to find answers to questions using a proprietary search technique that is different from traditional keyword based searches.

r/ally's Human Capital Knowledge Management (HCKM) solution adds intelligence to automation to provide answers by recognizing millions of concepts and their degree of association with each other, rather than relying solely on a keyword search. It uses the knowledge of these learned concepts, to deliver the answers that recruiters and hiring managers need, while also describing the associated topics that it found to validate the answer.

This case study illustrates how r/ally is used by recruiters and executive search consultants in Professional Staffing and Recruitment Services companies to

- 1. find candidates with the relevant skills and experience that already exist in their resume database, but have been 'hidden' because they were not uncovered by current search tools
- 2. find candidates for new assignments, by enabling r/ally to search candidates' skills and experience to find associated relevant topics or keywords that indicate who may have the required skills, even though the *exact* skill is not described in the resume

Benefits

In this case study, we demonstrate 3 benefits of r/ally:

- 1. The ability to query a database with simple, natural language
- 2. The use of semantic linking to infer a potential skill/knowledge set based on the presence of another relevant and related skill



3. How r/ally can be used - with minimal training and no formal knowledge of proper search syntax - by professional staffing and recruitment companies, or internal recruiters to quickly and easily assess and prioritize, suitable candidates for a new role

Objective

The objective for this case study is for a recruiter at a Staffing & Recruitment services company to quickly find a short list of suitably qualified candidate from a large database of resumes. The resumes can cover any industry, even one with proprietary, technical terms so no sorting, filtering or pre-processing of resumes is required.

Search Process

In this scenario, there are 3 steps to the search process using r/ally

- 1) A client manager identifies the core knowledge requirements for the post to be filled, and provides the recruiter with a brief requirement based on the skills and experience that the client wishes to use as the key skills needed for the open position
 - O These skills may include technical industry terms which only those working in a particular industry may be familiar with
- 2) A manager then uses these core knowledge requirements to search r/ally
 - o r/ally analyzes experiences in prospective candidates' backgrounds to detect direct matches and indirect matches with the core knowledge sets
- 3) r/ally then identifies a summary of the candidates that have the most relevant skills that match those skills that are 'connected' or associated with these experiences
 - o the recruiter can perform more detailed analysis of the short list of candidates by expanding upon the profile information provided by r/ally

Sample Query

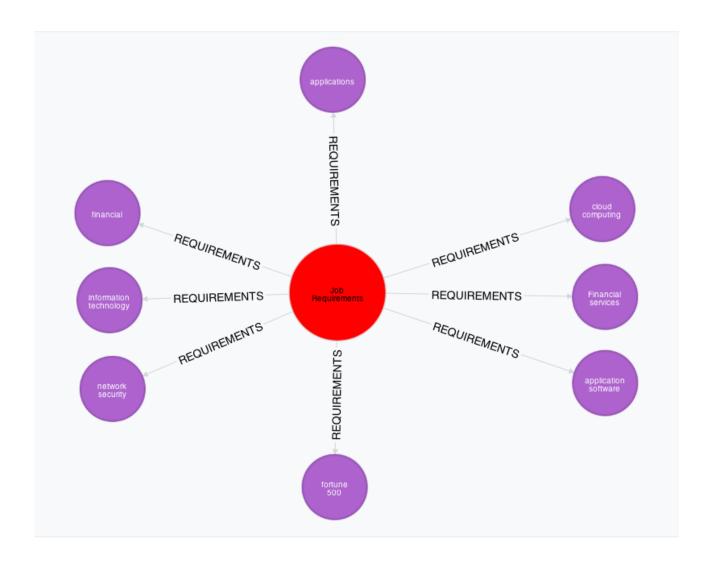
To start the process, the recruiter enters a search request to r/ally in natural language form as shown below



"Find someone with experience in IT network security and cloud computing applications who worked in at a financial services company in the Fortune 500"

Extracted Skills and Knowledge

r/ally identified the skills and knowledge listed below as potentially relevant to the position. A suitable candidate could state their qualifications or experience using a combination of the terms listed below as well as using phrases that could be related to these terms; they may not be expressly stated, or extracted from the job requirements, yet their skills may still be relevant to the position:





The table below illustrates the phrase in the left hand column represents the <u>Core Skill</u> that r/ally extracted from the job requirement query.

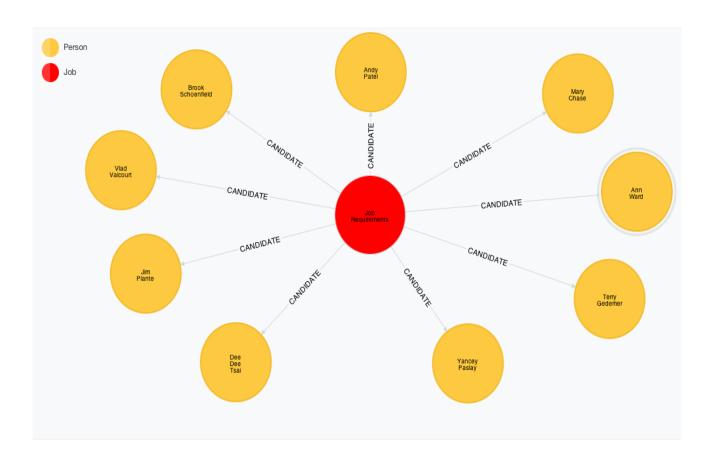
The right hand column shows <u>Related Skill</u> discovered by r/ally to be relevant to, and associated with, the required skill/knowledge. r/ally then uses these Core and Related Skills to search the database to find relevant candidates.

Required Core Skills / Knowledge Set	Related Skills / Knowledge discovered by r/ally
network security	computer security, information security, data loss prevention software, mobile security
application software	information technology, cloud computing, enterprise software, enterprise resource planning, system administrator, information security
cloud computing	computer network service-oriented architecture hardware virtualization, VMware, business continuity, Microsoft, Cisco Systems
financial services	infrastructure, credit union, commercial banking, insurance, credit card, capital market, retail banking, venture capital
Fortune 500	Ameriprise Financial, Intel, Netapp, Cargill, Dell US Bancorp, Hewlett-Packard
information technology	management, application software, IBM, information and communications technology



Candidate Short List

The diagram below illustrates the candidates that r/ally found with the most relevant skills that were distilled from a pool of 16,000 users in various industries. The visualization of each candidate's skill sets allows recruiters to quickly review if a candidate has the required and/or related skills



For the results of this search, we have asked r/ally to display the 9 candidates that appear to have the most relevant, and current, skills or related skills and experience that it finds in the data source.

When r/ally finds 2 candidates with skills and experience that an exact match of each other, r/ally will apply a higher weighted (i.e. greater relevancy) score to the candidate with the most recent skills.



The table below shows a summary of the 9 most relevant candidates, their weighted score and the 'skill' or experience that contributed most to the overall weighting.

CANDIDATE SUMMARY			SUMMARY VIEW	
Candidate	Candidate	Weighted	Highest Relevant	
Name	ID	Score	Skill	
Mary Chase	3232179	172.486	financial services	EXPAND
Vlad Valcourt	44510089	167.097	network security	EXPAND
Andy Patel	1178998	164.008	information technology	EXPAND
Brook Schoenfield	3091898	160.577	network security	EXPAND
Jim Plante	35943441	155.732	information technology	EXPAND
Yancey Paslay	50556367	155.577	information technology	EXPAND
Ann Ward	15313981	147.912	information technology	EXPAND
Terry Gedemer	22346278	145.172	financial services	EXPAND
Dee Dee Tsai	14352030	141.941	network security	EXPAND

Once the recruiter or talent manager has reviewed the summary, he/she can expand the results for one or more of the candidates to see who may have the most relevant in-depth skills that the enterprise is looking for.

The recruiter may decide to find out more about the highest 'ranked' candidate Mary Chase. They may also decide that – because network security is an important experience - they would also like to find out more about Vlad Valcourt, the #2 candidate, and Brook Schoenfield, the #4 ranked candidate on the list.

The recruiter can then click on the EXPAND button, to view an expanded list of the skills, and associated experiences that r/ally discovered that influenced the ranking of the candidates.

After clicking EXPAND, r/ally provides the recruiter with an expanded list of skills for the candidate, with a prioritized list of the skills by the weighting contributed by each skill.



The Expanded View of skills for Mary Chase will looks like the results displayed below.

CANDIDATE SUMMARY			EXPANDED VIEW			
Candidate	Weighted	Candidate	Skills / Experience	Relevant or Related	Weight of	
Name	Score	ID	Required	skill identified by	Contributory	
				r/ally	Skill	
Mary Chase	159.29	3232179	Fortune 500	Ameriprise Financial,	5234.64	
			experience	S&P		
			financial services	credit union, JP	4187.00	
				Morgan, investment		
				banking		
			information	IBM, Dell, cloud	3035.01	
			technology	computing		
			application software	information technology,	3035.01	
				SAP, VMware		

The second candidate on the results page, was Vlad Valcourt. Vlad's score was lower than Mary Chase, but he may have skills in the Relevant Skill column that are of more interest for the recruiter because of the more specialized product knowledge or other specific skills that the recruiter seeks for the role to be filled.

So, after clicking on the EXPAND button for this candidate, the recruiter may see some skills that look as follows.

CANDIDATE SUMMARY		EXPANDED VIEW			
Candidate Name	Weighted Score	Candidate ID	Skills / Experience Required	Relevant or Related skill identified by r/ally	Weight of Contributory Skill
Vlad Valcourt	154.314	44510089	network security	Cisco, router, firewall	4456.24
			cloud computing	SaaS, AWS, Netsuite	2573.90
			information	Hewlett Packard,	2350.02
			technology	client/server	
			application software	cloud computing	2573.90



The other candidate who has network security experience is Brook Schoenfield. The recruiter can take a closer look and see the following skills sets in the Expanded view.

CANDIDATE SUMMARY			EXPANDED VIEW		
Candidate	Weighted	Candidate	Skills /	Relevant or	Weight of
Name	Score	ID	Knowledge/	Related skill	Contributory
			Experience	identified by	Skill
			Required	r/ally	
Brook Schoenfield	148.293	3091898	network security	MLPS, firewall,	4456.24
				security key	
			fortune 500	Intel	2667.59
			cloud computing	AWS, PaaS	2573.90
			information	storage, HP	1360.74
			technology		
			application software	cloud	2075.28
				computing	

These results were drawn from a large, anonymized database of profiles drawn from many industry segments. It is a simple search using generic terms. However, r/ally can understand more complex and technical industry specific terms. This is of great benefit to an internal recruiter, who may not be familiar with the skills required in every department of a large enterprise.

Summary

After taking input on the skills and experience required by the client, the recruiter has used r/ally to quickly and easily discover candidates with the appropriate skills required by the client. In the process, the recruiter is able to augment their technical knowledge of how some skill sets, products and other technical terms are associated with desired skills

The entire process – including searching through a 16,000 candidate database, has taken 20-30 minutes of reviewing a summary of potential candidates and arriving at a decision on which candidate(s) to proceed to the next stage with.

Using r/ally's Human Capital Knowledge Management (HCKM) enhanced analytics in conjunction with the collaborative r/ally application also enables professional recruiters to use r/ally while on the go from their mobile device.



Benefits Summary

This Case Study demonstrates the significant reduction in time and effort and the costs that can be saved by using r/ally to search a database of profiles from an internal legacy data source.

Because of the ability to save time by conducting multiple searches and iterating those searches, a full time professional recruiter using r/ally can

- o reduce their time spent looking for suitable candidates by over 50%
- o increase productivity on a pro-rated basis, and
- o gain a competitive advantage by finding and placing candidates quicker than using traditional keyword search methods

A recruiter using r/ally for <u>less than two hour per week</u> will generate sufficient savings in time and effort – excluding the <u>additional</u> benefits from reducing recruitment cycle time - for r/ally's Human Capital Knowledge Management (HCKM) solution to pay for itself and generate a positive Return on Investment for the enterprise.