

Case Study

# InfoJobs

## InfoJobs

# Europe's leading job site recommends your career path with Neo4j

### INDUSTRY

HR & Recruiting

### CHALLENGE

Recommendations

### STRATEGY

Build new portal to model job seekers' potential career paths

### SOLUTION

Neo4j Graph Database

### RESULT

Uncovered business value through data relationships

## Challenge

InfoJobs is Europe's largest and most successful online job search site in Europe that allows employees to search for job postings, and employers to post new job opportunities onto a platform. InfoJobs connects employees with companies through an online job search portal, and allows job seekers to store their career information and find new opportunities.

Marc Pou, Product Manager at InfoJobs, began looking into graph databases when it became difficult to model and exploit their data easily. With 8 million resumes for job seekers, each document contained specific professional experience for each job seeker. The Career Path Portal's objective is to identify popular paths that their job seekers have taken in their professional lives, so that others can refer to that for ideas on their own career growth.

The Career Path Portal produces useful information to help users make decisions on their next career step, based on similar users with the same background.

In addition, the Career Path Portal provides overarching information, like "what is the probability that I will achieve this job title, based on my current status?"

## Numbers

This Portal required management of huge quantities of information including 4 million candidates resulting in 26098726 nodes, 12 million job experiences resulting in 171882297 properties, and 18 million skills with 23 relationship types.

In order to optimize the system to deliver the results interactively, InfoJobs combined Neo4j with memcache to store the results of the algorithms, based on metrics over each month.

Without Neo4j, these algorithms would have required an excessive amount of pre-calculations, complexity and cost.

Neo4j is used as the database to store all static information, and the information is updated once a month. Based on the relationships and nodes, the system is able to make queries based on the graph.

Thanks to the Neo4j implementation, InfoJobs discovered the value of their data through the visibility of implicit connections, and saved valuable time and money for the project.



"Using Neo4j simplifies this complexity, speed calculation, scalability and is easy to code."

- Marc Pou,  
Product Manager, InfoJobs

Neo Technology is the creator of Neo4j, the world's leading graph database that brings data relationships to the fore. From companies offering personalized product and service recommendations; to websites adding social capabilities; to telcos diagnosing network issues; to enterprises reimagining master data, identity, and access models; organizations adopt graph databases to model, store and query both data and its relationships. Large enterprises like Walmart, eBay, UBS, Nomura, Cisco, HP, and Telenor, as well as startups like CrunchBase, Medium, Polyvore, and Zephyr Health use Neo4j to unlock business value from data relationships.

Questions about Neo4j?  
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