

CASE STUDY

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

InfoJobs

COMPANY

InfoJobs is the largest and most successful online Job Search in Europe. InfoJobs connects employees with companies through an online job search portal, and allows job seekers to store their career information and find new opportunities.

INDUSTRY

Web/ISV

USE CASE

- HR & Recruiting
- Online Recommendations

PROJECT MANAGER

Pou is responsible for the New Initiatives Team at InfoJobs. This generally involves Big Data and Matching solutions. Currently, he defines, develops and manages the Career Portal for InfoJobs.

INFOJOBS' CHALLENGE

InfoJobs is a career site that allows employees to search for job postings, and employers to post new job opportunities onto a platform.

A GRAPH DATABASE FOR A CAREER PORTAL

Marc Pou 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, such as "what is the average age of a person with a certain job title?" or "what is the probability that I will achieve this job title, based on my current status?"

„Neo4j is enabling people to work with graphs in a very easy way and helps people to solve problems that are difficult to solve until now.“

– Marc Pou

NUMBERS

This Portal required management of huge quantities of information:

4 million candidates	26098726 nodes
12 million job experiences	171882297 properties
6 million studies	137429999 relationships
18 million skills	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. **“Using Neo4j simplifies this complexity, speed calculation, scalability and is easy to code.”**

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.

ABOUT NEO TECHNOLOGY

Graphs are everywhere. Neo Technology has been instrumental in bringing the power of graphs to numerous organizations, including a rapidly-growing number of Global 2000 customers, such as Cisco, HP, Accenture, Deutsche Telekom, and Telenor. Serving customers in production for over a decade, Neo4j is the world's leading graph database with the largest ecosystem of partners and tens of thousands of successful deployments.