



Case Study

Intelligent Resume Management System

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We developed an AI-based intelligent resume management system to search and shortlist candidates for a given job profile.



Summary

We developed an AI-driven classifying engine for resumes by training it with sample resumes. We also provided a panel where the client can search and shortlist candidates based on the extracted text and contexts. We also developed an AI-driven recommendation engine that provides a score to each candidate, based on his/her credentials.

Industry

IT Services

Users

Recruitment Personnel, HR Managers, HR Executives

Technologies

Python, MongoDB, jQuery, HTML5, CSS, Machine Learning, Artificial Intelligence, Deep Learning, Natural Language Processing

Team Size

9 Oodlites

Challenges

Searching and shortlisting candidates for any job is always a pain for HR reps as it requires a lot of manual efforts. Our client wanted to solve this problem of shortlisting candidates without going through thousands of resumes and manually matching them with the requirements, one by one.

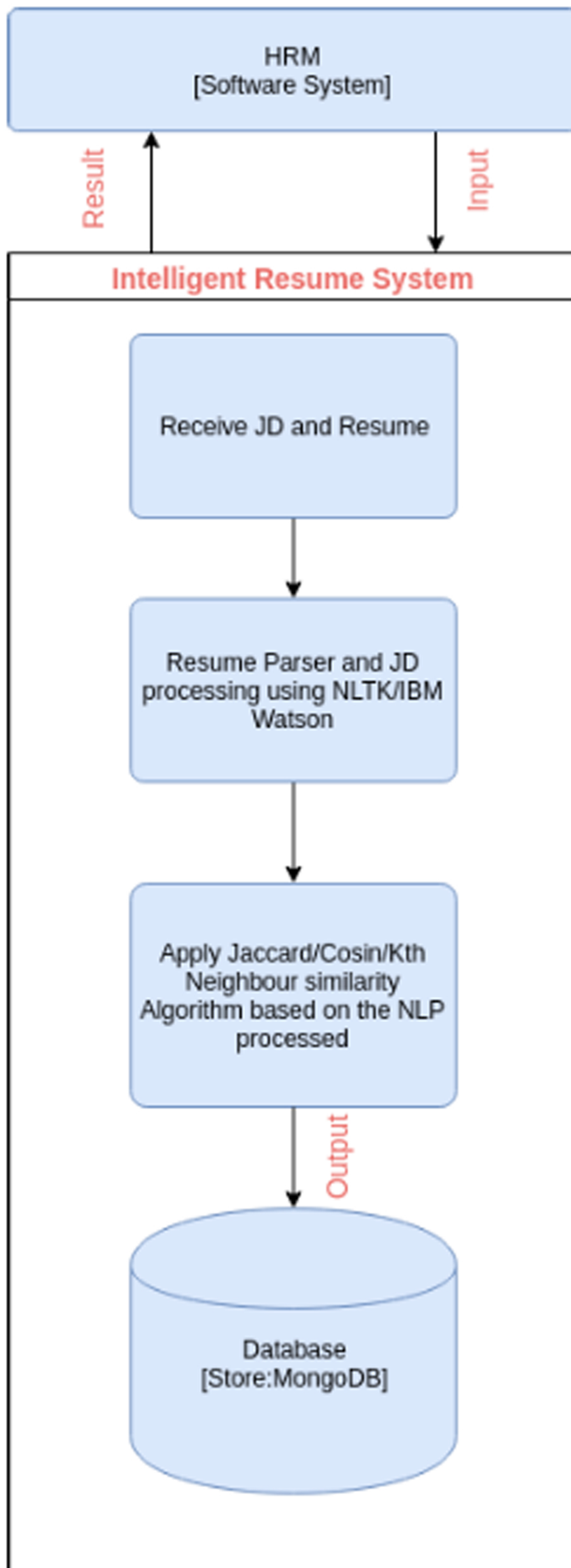
Solution

Our team parsed a number of resumes shared by the client and extracted textual data using a rule-based system. We followed a sectional approach where we divided the CV into smaller sections and then the model handled each section individually. We used various open-source Text Extraction and Natural Language Processing libraries for identifying entities and contexts. Also, we stored all parsed data in a database for future reference.

Data Fields

<div>1. Current Compensation</div> <div>2. Expected Compensation</div> <div>3. Education</div> <div>4. Specialization</div> <div>5. Location</div> <div>6. Earliest Start Date</div> <div>7. Total Experience</div> <div>8. Relevant Experience</div> <div>9. Communication</div> <div>10. Current Employer</div>	<div>11. Stability</div> <div>12. Education Gap</div> <div>13. Work Gap</div>
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Context Diagram



Steps to Build this System

1. Data preparation: Text extraction, processing and normalization using Textract
2. Keyword extraction using NLTK/IBM Watson
3. Use different algorithms to test the accuracy e.g. Kth nearest neighbour, Cosin similarity, Jaccard
4. Customize the algorithm based on the factors
5. Develop API to serve the request made by HRM

Results Delivered

We successfully developed an intelligent system capable of parsing and classifying resumes automatically with acceptable accuracy. The system ensures that a good candidate profile never gets missed. The candidates can be shortlisted automatically and can be matched with pre-defined requirements.

About Oodles ERP

Oodles ERP is a software services company that offers complete enterprise software development services with a focus on implementing next-gen technologies. With a proven track record in custom ERP development, we have successfully completed 50+ software projects related to CRM, HRM, inventory/warehouse, eCommerce, supply chain, and logistics. We are mainly focused on helping startups and small-to-medium enterprises to achieve digital transformation through cost-effective ERP software solutions.

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