



TECHNICAL SPECIFICATIONS

AI Matching Engine

Sovren has the most robust AI matching engine because we've spent decades perfecting it. Our engine's technical specifications are detailed below so you can see exactly what to expect when using our premier matching technology – from integration to output.

Deployment	100% Cloud-hosted solution.										
Integration	Available as a cloud-based service via a SOAP API or via a RESTful API.										
Stability	Built-in monitoring to automatically detect and repair corrupted indexes. Data is automatically partitioned for performance and archiving.										
Scalability	Runs on Amazon AWS, scales both vertically and horizontally and has no document limits.										
Input Formats	Parsed document input supported in JSON or XML format.										
Compatibility	The Sovren AI Matching Engine works with the Sovren Resume Parser and the Sovren Job Order Parser to provide advanced matching capabilities between a source document and candidates.										
Distinctive Features	Our engine leverages our proprietary AI Matching algorithm that uses profiles rather than keywords. It's the only engine that allows hybrid Boolean/Semantic searches.										
Configurable Categories	<p>Each matching transaction has a user-configurable set of categories that influence the overall score, which allows the engine to be fine-tuned to better serve applications across multiple industries.</p> <p>Categories include:</p> <table border="0"> <tr> <td>Certifications</td> <td>Languages</td> </tr> <tr> <td>Education</td> <td>Management Level</td> </tr> <tr> <td>Employers</td> <td>Skills</td> </tr> <tr> <td>Executive Type</td> <td>Taxonomies</td> </tr> <tr> <td>Job Titles</td> <td>Experience Range</td> </tr> </table>	Certifications	Languages	Education	Management Level	Employers	Skills	Executive Type	Taxonomies	Job Titles	Experience Range
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Transaction Output	Output includes a list of results ordered in descending order of the overall score. Scores are broken out by category for each match and include analysis messages that describe a transaction.										

Matching Directions	<p>Resume : Job (Find the best matching jobs for a resume)</p> <p>Job : Resume (Find the best matching resumes for a job)</p> <p>Resume : Resume (Find resumes similar to this one)</p> <p>Job : Job (Find jobs similar to this one)</p> <p>Criteria : Resume (Find best resumes for the specified criteria)</p> <p>Criteria : Job (Find best jobs for the specified criteria)</p>																																						
Semantic Searches	<p>Can be built using an object, or queries can be hand-rolled (actual query strings).</p>																																						
Data Replication	<p>Replicates your most recent data for performance and high availability.</p>																																						
Speed	<p>Sub second matching/searching transaction times.</p>																																						
Scoring	<p>Our AI Matching Engine provides absolute scoring, where the best match is reported at its true score from 0-100. We also report sub-scores by different categories of data.</p>																																						
Search Filtering	<p>Supports user specified data fields for searching/filtering.</p>																																						
Highlighting Hits	<p>Supports highlighting of hits in a document.</p>																																						
Semantic Indexing of Data	<p>Data Indexed:</p> <table border="0"> <tr> <td>Document ID</td> <td>Current management level</td> </tr> <tr> <td>Document language</td> <td>Is an author</td> </tr> <tr> <td>User specified data fields</td> <td>Is a public speaker</td> </tr> <tr> <td>Country</td> <td>Has/was in the military</td> </tr> <tr> <td>Region</td> <td>Has been self employed</td> </tr> <tr> <td>Municipality</td> <td>Has patents</td> </tr> <tr> <td>Postal code</td> <td>Security credentials</td> </tr> <tr> <td>Location</td> <td>Education</td> </tr> <tr> <td>Skills</td> <td>School name</td> </tr> <tr> <td>Taxonomies</td> <td>Degree name</td> </tr> <tr> <td>Certifications</td> <td>Degree major</td> </tr> <tr> <td>Licenses</td> <td>Degree type</td> </tr> <tr> <td>Languages</td> <td>Minimum degree level</td> </tr> <tr> <td>Position title</td> <td>Minimum GPA</td> </tr> <tr> <td>Assistant to</td> <td>Graduation status</td> </tr> <tr> <td>Employer</td> <td>First name</td> </tr> <tr> <td>Years of work experience</td> <td>Last name</td> </tr> <tr> <td>Years of management experience</td> <td>Revision date</td> </tr> <tr> <td>Executive type</td> <td></td> </tr> </table>	Document ID	Current management level	Document language	Is an author	User specified data fields	Is a public speaker	Country	Has/was in the military	Region	Has been self employed	Municipality	Has patents	Postal code	Security credentials	Location	Education	Skills	School name	Taxonomies	Degree name	Certifications	Degree major	Licenses	Degree type	Languages	Minimum degree level	Position title	Minimum GPA	Assistant to	Graduation status	Employer	First name	Years of work experience	Last name	Years of management experience	Revision date	Executive type	
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