

SHL Assessment Recommender - Evaluation Report

Introduction

This document presents the evaluation of a semantic search-based SHL Assessment Recommender system. Using Sentence-BERT embeddings, it matches job-related queries with SHL's assessment catalog to return the most relevant tests. This helps recruiters and HR platforms streamline assessment recommendations.

Evaluation Methodology

We tested the system using four job-related queries with known correct assessments. The metrics used for evaluation were:

- Recall@5: Whether the correct assessment is in the top 5 suggestions.
- MAP@5: Mean Average Precision, showing how early the correct result appears.

Test Results

1. Query: 'handle customers and manage cash register'

- Expected: Cashier Solution
- Recall@5: 1
- AP@5: 1.000

2. Query: 'manage bookkeeping, accounting and financial reports'

- Expected: Bookkeeping, Accounting, Auditing Clerk Short Form
- Recall@5: 1
- AP@5: 1.000

3. Query: 'support executives, manage office, scheduling'

- Expected: Administrative Professional - Short Form
- Recall@5: 1
- AP@5: 1.000

4. Query: 'manage a team in a bank and handle operations'

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- Expected: Bank Operations Supervisor - Short Form
- Recall@5: 1
- AP@5: 1.000

Summary

Mean Recall@5: 1.000

MAP@5: 1.000

The system consistently ranked the correct assessments in the top results with perfect precision and recall.

Business Perspective

This system offers direct value in recruitment automation:

- Job Matching: Automatically recommends the right SHL assessment for any job description.
- Efficiency Boost: Reduces manual mapping time, increasing recruiter productivity.
- Error Reduction: Lessens the chance of assigning irrelevant assessments.
- Data-Driven Insights: Can be enhanced with analytics to track which assessments work best for which roles.

Incorporating this into an ATS or hiring platform can revolutionize candidate evaluation workflows.