

SHL Assessment Recommendation System

One-Page Approach Summary

Problem:

Hiring managers struggle to find the right assessments efficiently via keyword filters.

Solution Overview:

- Scrape SHL catalog (Requests + BeautifulSoup)
- Embed assessment name + description using OpenAI embeddings
- Index embeddings in FAISS via LangChain
- Serve recommendations through FastAPI endpoint
- (Optional) Self-contained Streamlit UI for demo

Key Technologies:

- Scraping: Requests & BeautifulSoup
- Embeddings & Vector Store: LangChain + OpenAI + FAISS
- API: FastAPI + Uvicorn
- UI: Streamlit

Evaluation Metrics:

- Mean Recall@3: fraction of relevant assessments in top-3
- MAP@3: mean average precision at 3

Next Steps:

- Integrate real user logs for personalized recommendations
- Add filters (duration, remote support)
- Enhance UI with role-based presets