

## AI-Powered Candidate Matching for an Online Marketplace



### Problem

Recruiters faced a large volume of resumes, making it time-consuming and challenging to identify the most suitable candidates.

This led to extended time-to-fill positions and potentially missed opportunities to hire top talent.

### Solution

Implementation of an AI-powered Applicant Tracking System (ATS) featuring:

- ✓ **Machine Learning for Resume Analysis:** Algorithms trained to parse resumes, extract relevant skills, and match them against job requirements.
- ✓ **Natural Language Processing (NLP):** Understanding nuances in candidate profiles and job descriptions for more accurate matching.
- ✓ **Customizable Ranking:** Prioritizing key qualifications and creating candidate rankings based on fit.

### Results

- ✓ Significantly reduced time-to-fill by streamlining the candidate screening process.
- ✓ Improved quality of hire through more accurate identification of best-fit candidates.
- ✓ Enhanced recruiter efficiency by allowing them to focus on top-ranked candidates.

### Technology Stack

- ✓ **Applicant Tracking System:** Core ATS with AI capabilities or integration with specialized AI recruitment tools.
- ✓ **Machine Learning:** Libraries and tools for developing resume parsing and matching algorithms.
- ✓ **NLP:** Libraries like NLTK, SpaCy, or similar for analyzing job descriptions and resumes

### Software Development

- ✓ **Model Training:** Leveraging historical hiring data to train machine learning models on successful candidate
- ✓ **Ranking System:** Development of customizable ranking systems based on the company's hiring priorities.
- ✓ **Security:** Intuitive UI for recruiters to interact with AI recommendations and manage the hiring process

### Before Metrics

Time-to-fill: 45 days

Quality of hire (e.g., based on performance reviews after a defined period): 70%

### After Metrics

Time-to-fill: 30 days

Quality of hire: 80%