**✅ Completed**

**1️⃣ Resume Classification Model (BERT-based)**

* **Purpose: Predicts resume category (e.g., Data Science, Web Dev, Cybersecurity).**
* **Status: ✅ Trained & working.**

**✅ Completed**

**2️⃣ Resume Skill Extraction Model (BERT/RoBERTa for Named Entity Recognition)**

* **Task: Extract skills, experience, and education from resumes.**
* **Status: ✅ Trained & working.**

**⏭️ Next Models to Implement**

**3️⃣ Job Description Skill Extraction Model (RoBERTa + SpaCy NER)**

* **Task: Extract required job skills from job descriptions.**
* **Next Step: Train roberta-large + integrate SpaCy NER.**

**4️⃣ Resume-Job Matching Model (SBERT / Universal Sentence Encoder)**

* **Task: Compute similarity between resume skills & job requirements.**
* **Next Step: Implement cosine similarity with embeddings.**

**5️⃣ Job Recommendation Ranking Model (Hybrid TF-IDF + Deep Learning)**

* **Task: Rank job listings based on skill matching & user history.**
* **Next Step: Train TF-IDF model + integrate with DNN for ranking.**

**Final Model Integration Plan**

| **Module** | **Model** | **Purpose** |
| --- | --- | --- |
| **Resume Skill Extraction** | Fine-tuned BERT/RoBERTa | Extract skills, education, experience |
| **Job Description Skill Extraction** | RoBERTa + SpaCy NER | Extract required job skills |
| **Resume-Job Matching** | SBERT / Universal Sentence Encoder | Compute skill-job similarity |
| **Resume Classification** | Fine-tuned BERT / DistilBERT | Classify resume category |
| **Job Recommendation Ranking** | Hybrid (TF-IDF + DNN) | Rank jobs based on relevance |