

# Module 5 – Backend & Database Integration

## Overview

The Database & Backend Integration module forms the technical backbone of the entire platform. It ensures secure authentication, scalable API services, efficient data storage, and seamless communication between all front-end and AI modules.

## Backend Architecture

- Spring Boot REST APIs for authentication, resume upload, job management, and analytics.
- Hibernate ORM for relational mapping.
- Microservice-ready architecture with modular endpoints.
- JWT-based authentication and role-based access.

## Database Layer

- MongoDB for resume storage and JSON-like structures.
- PostgreSQL/MySQL for relational data such as users and job postings.
- Indexing for fast search & candidate matching queries.

## Integration Flow

1. Frontend (React) sends API request.
2. Spring Boot processes logic → Fetches data from DB.
3. AI module performs parsing/matching → Sends score.
4. Results displayed to users (job seeker or recruiter).