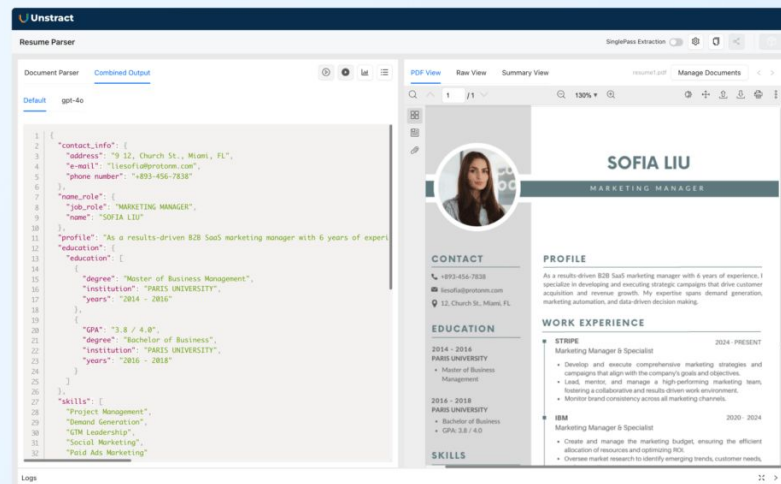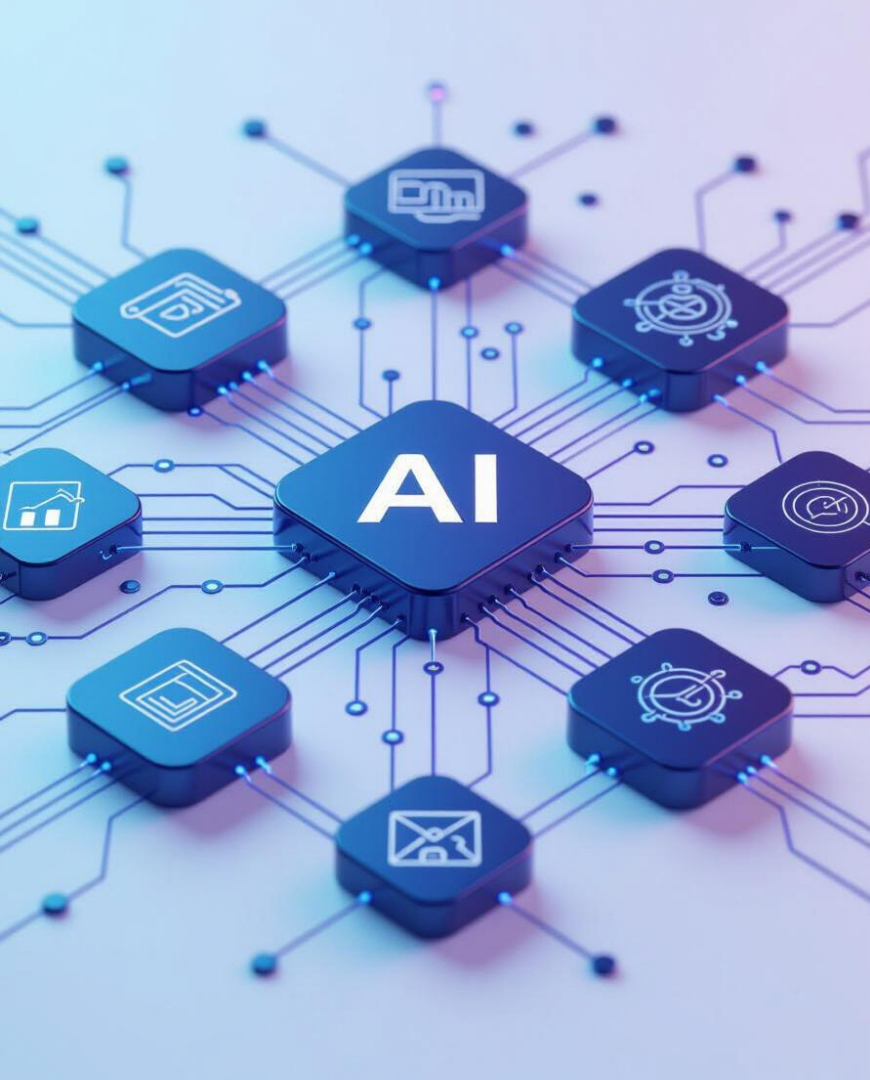# Project Overview

Introducing ResumeAI: An AI-powered resume parser designed to revolutionize recruitment processes.

- **Goal**: Automate resume data extraction and analysis with unparalleled accuracy and speed.
- **Hackathon Focus**: Developed for rapid deployment and scalability, showcasing cutting-edge AI in HR tech.
- **Impact**: Dramatically reduces manual effort, enhances candidate screening, and improves overall recruitment efficiency.

Tech Stack & Frameworks

Our robust architecture leverages industry-leading technologies:

- **AI**: TensorFlow, Hugging Face Transformers for NLP and data extraction.
- **Backend**: FastAPI for high-performance REST API, ensuring speed and reliability.
- **Database**: PostgreSQL for structured data storage, guaranteeing data integrity.
- **Deployment**: Docker for seamless containerization and scalability across platforms.
- **Documentation**: OpenAPI with Swagger UI for easy API exploration and integration.

Document Upload and Processing Pipeline

Ensuring secure and efficient resume handling:

- **Multi-Format Support**: Accepts PDF, DOCX, TXT, JPG, and PNG (with OCR) files.
- **File Size Limit**: Up to 10MB per resume to maintain optimal performance.
- **Security**: Integrated malware scanning to protect against malicious uploads.
- **Asynchronous Processing**: Parses resumes in the background for a non-blocking user experience.
- **Validation**: Verifies file integrity and format compliance before processing.

Intelligent Resume Parsing Capabilities

Unleashing the power of AI for comprehensive data extraction:

- **Core Data Extraction**: Accurately identifies **contact information**, **work experience**, **education**, and **skills**.
- **Achievement Quantification**: Extracts and analyzes **quantifiable achievements** to highlight candidate impact.
- **Career Level Inference**: Determines **career level** based on experience and responsibilities.
- **Skill Categorization**: Differentiates between **soft** and **technical skills** for targeted candidate matching.

What Does RChilli Resume Parser Offer?

140+ Data Fields Extraction · Email Inbox Integration · Multilingual Support · Bulk Import · Configurable Data Fields · Document Template Creation

API Integration & AI Enhancement Features

API Integration: Streamlined access and advanced AI functionalities:

- **REST API Endpoints**: Dedicated endpoints for **resume upload**, **parsing status**, and **data retrieval**.
- **Real-Time Output**: Provides structured **JSON outputs** for seamless integration with recruitment systems.

AI Enhancement Features:

Skill Normalization: Standardizes skills (e.g., "JS" → "JavaScript") for consistent data.

Experience Inference: Infers missing dates or details based on job context.

Documentation: Swagger UI for interactive API documentation and testing.