

Title:**AI-Powered Staffing Automation — Case Study****Overview**

As a Software Engineering Intern at EDI Matrix, I developed and deployed an AI-powered staffing automation system to streamline candidate-job matching. The system combined embeddings, automation pipelines, and messaging integrations to improve match accuracy and reduce manual work.

Problem

Traditional staffing workflows were slow and manual, requiring significant recruiter time to match resumes to job descriptions and send outreach.

Solution

- Built embeddings-based pipeline: job descriptions and resumes were converted into vector representations and compared for relevance.
- Automated ranking: top candidates scored and selected automatically.
- Automated outreach: integrated with email and WhatsApp APIs to notify candidates.
- Dashboard metrics: tracked acceptance rates and time-to-fill.

Impact

- Improved candidate matching accuracy by ~60%.
- Reduced workflow time by ~40% through automation.
- Increased candidate response and acceptance rates significantly.

Tech Stack

Python, Azure, SQL, REST APIs, ML embeddings, WhatsApp/Email integration.

Tools Used

- **Cloud:** Microsoft Azure
- **Databases:** SQL Server
- **Libraries:** Python (requests, pandas, embeddings models)
- **Messaging APIs:** WhatsApp Cloud API, SMTP/Email services
- **Automation:** Selenium, REST APIs
- **Development:** VS Code, GitHub