



SUMMER INTERNSHIP PRESENTATION

Resume Screening Application



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Prepared by: Wissem Hammoudi

Table

of Contents

1

General Context

2

Problematic

3

Proposed Solution

4

Realization

Presentation of the Host Organization

DNEXT Intelligence SA specializes in agricultural commodities.

Commodities Market Analysis.

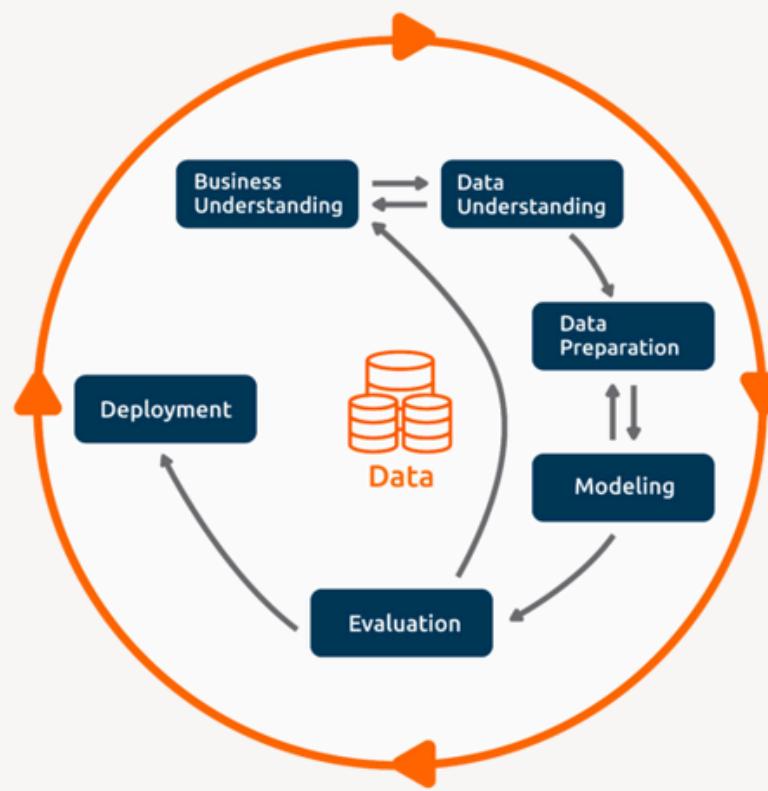
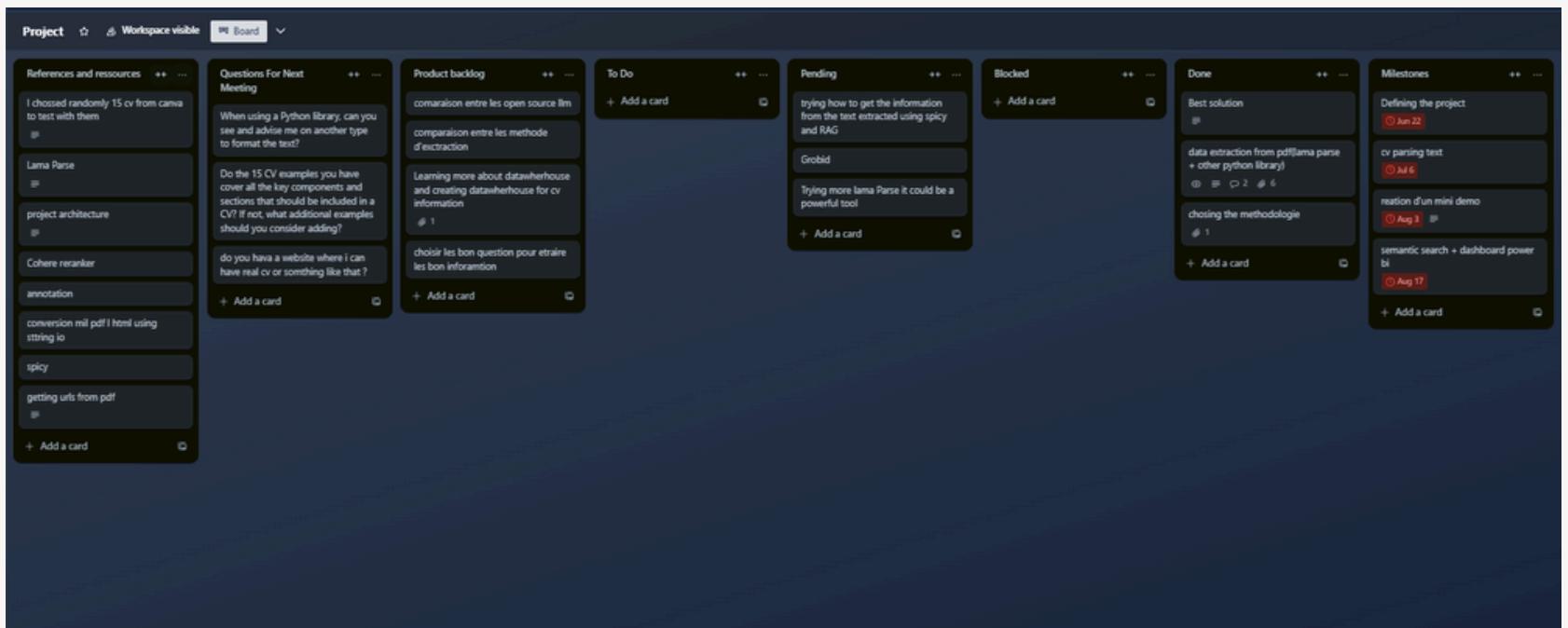
Agricultural Commodity Market Research.

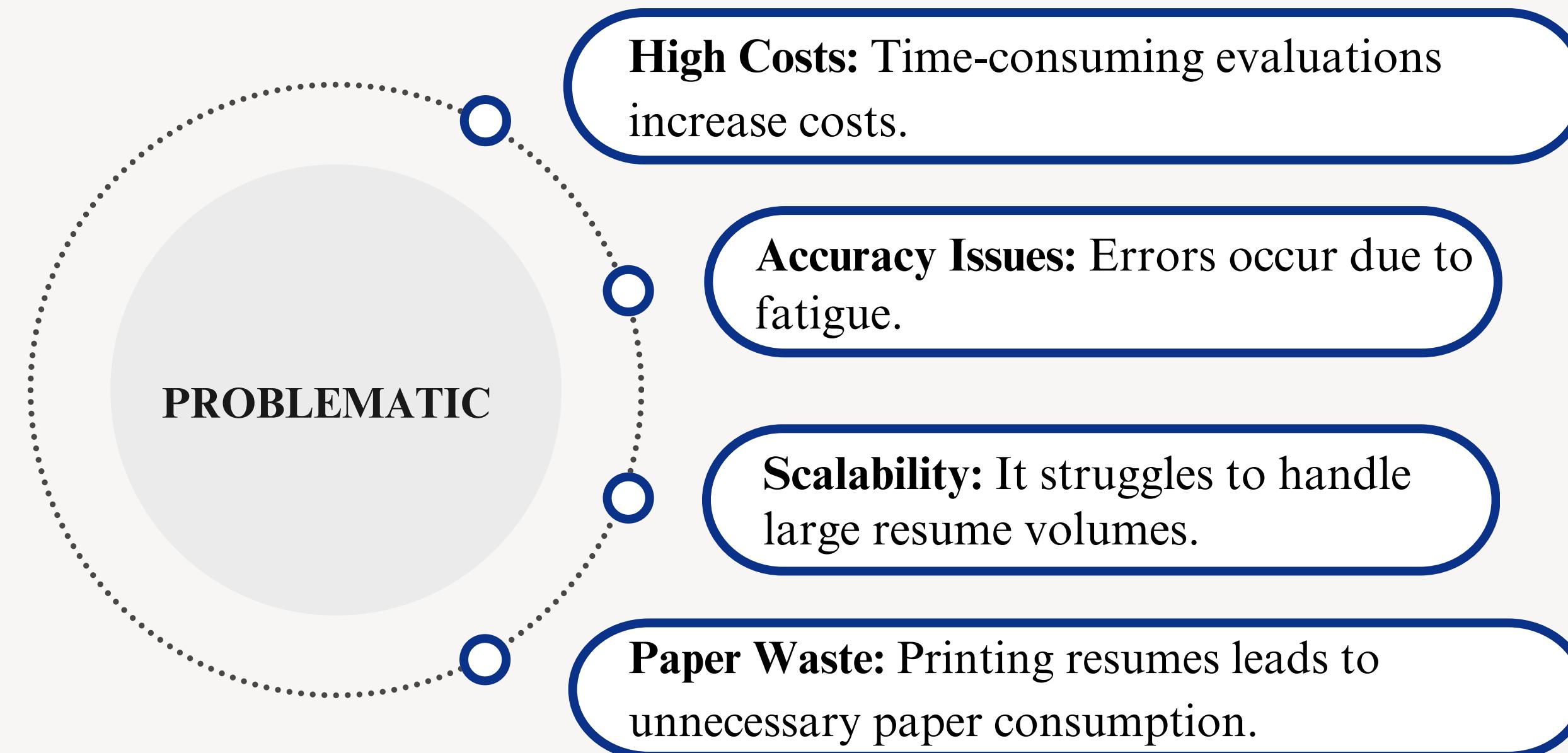
Data Intelligence Platform.

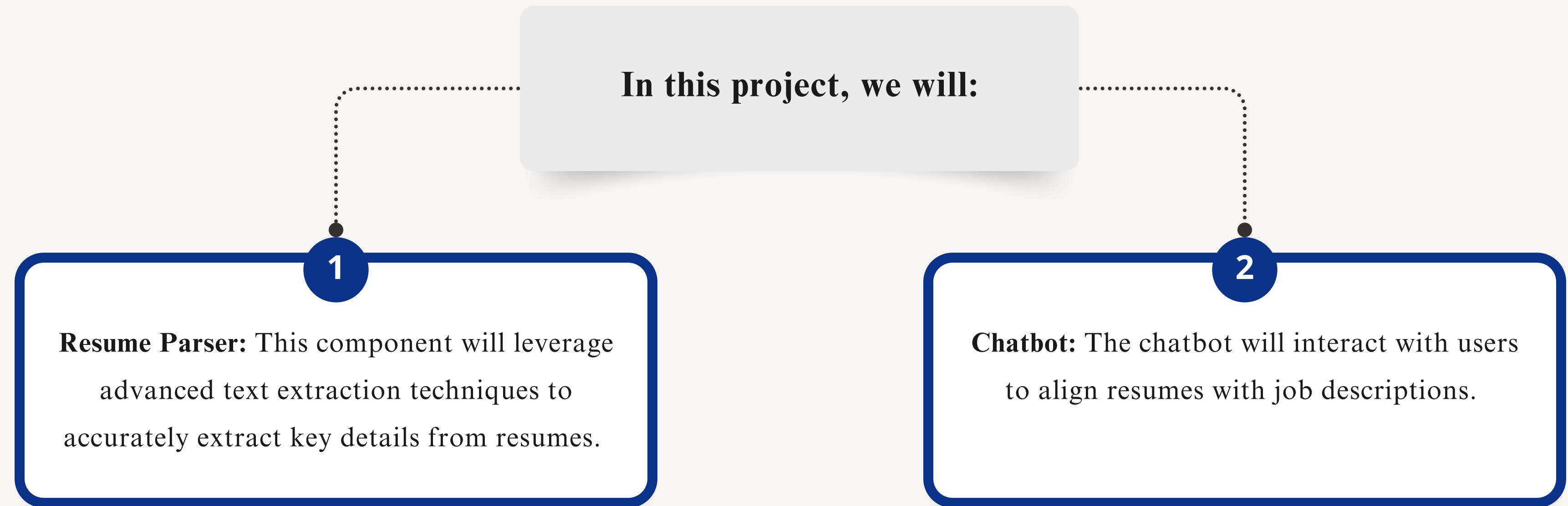


They offer valuable insights for agribusinesses and agricultural traders, serving both small and large companies in the global agricultural market.

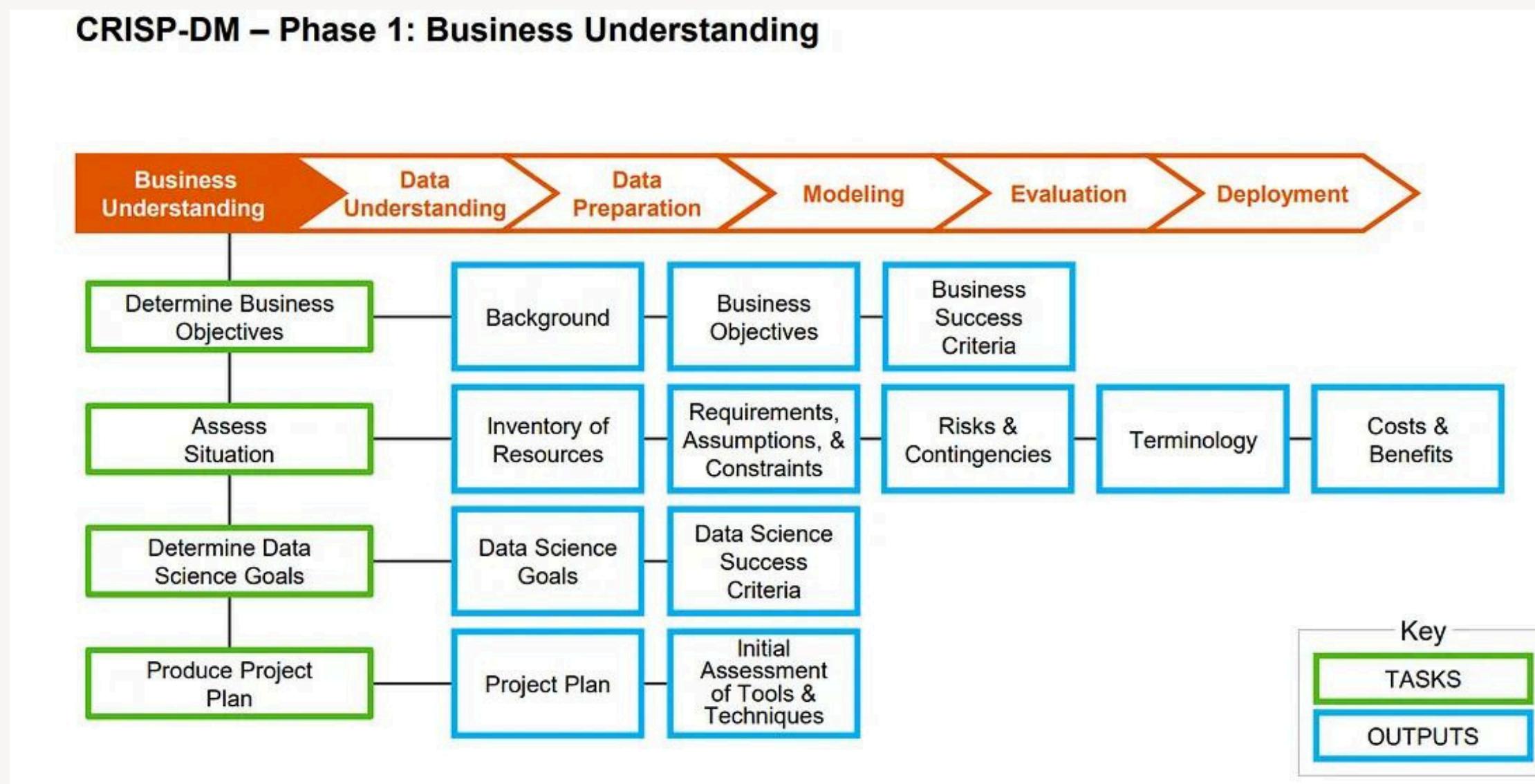
Work Methodology







1- Business Understanding

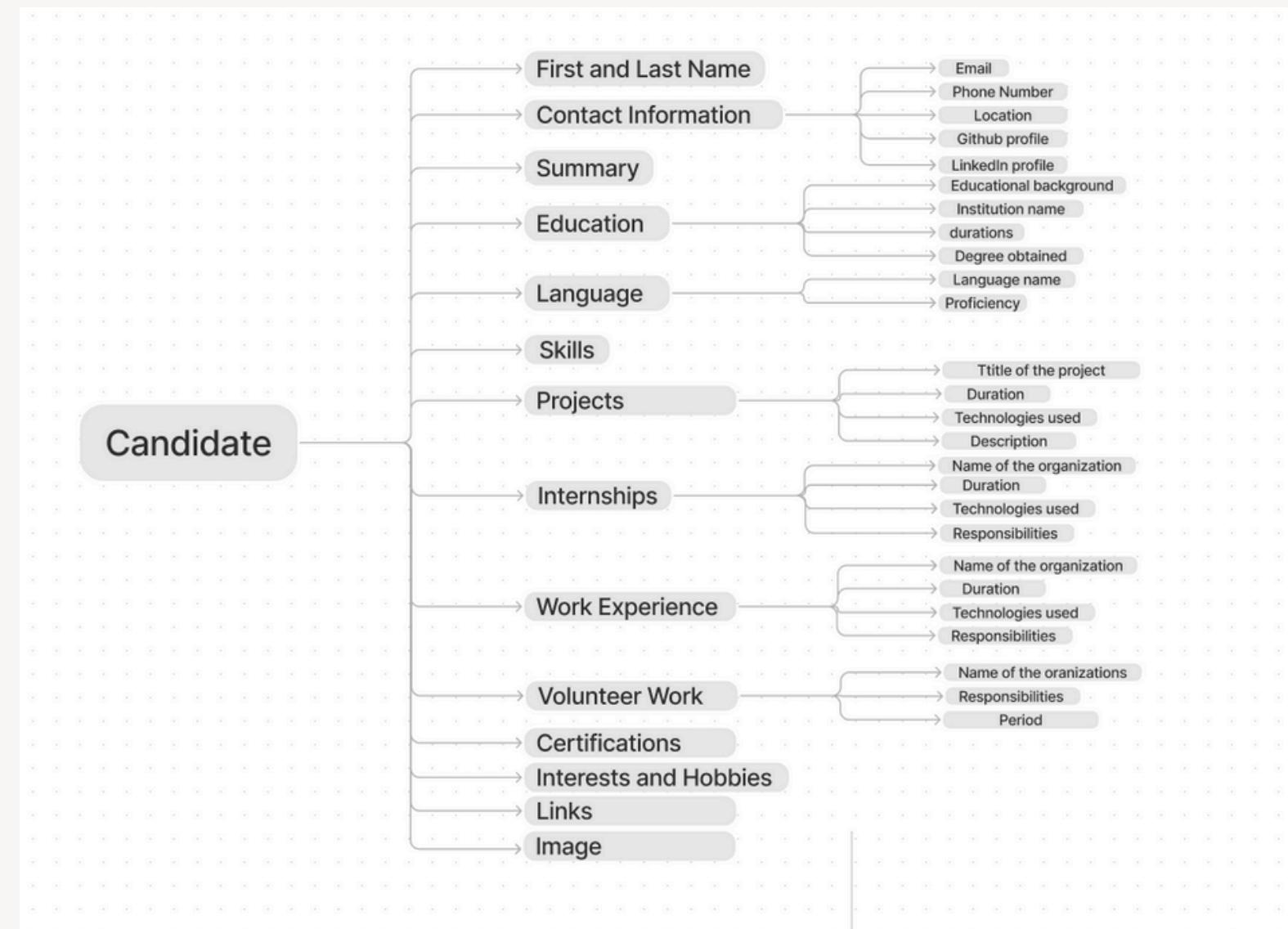


2- Data Understanding

For data collection, I used Selenium to automate browser interactions and render JavaScript content, while BeautifulSoup parsed the HTML to extract resume download links. This approach helped me build a dataset of 300 resumes.

<https://www.resumeviking.com/wp-content/uploads/2022/02/Stockholm-Resume-Template-Simple.pdf>
<https://www.resumeviking.com/wp-content/uploads/2022/02/New-York-Resume-Template-Creative.pdf>
<https://www.resumeviking.com/wp-content/uploads/2022/02/Vienna-Modern-Resume-Template.pdf>
<https://www.resumeviking.com/wp-content/uploads/2022/02/Sydney-Resume-Template-Modern.pdf>
<https://www.resumeviking.com/wp-content/uploads/2022/02/London-Resume-Template-Professional.pdf>
<https://www.resumeviking.com/wp-content/uploads/2022/02/Dublin-Resume-Template-Modern.pdf>
<https://www.resumeviking.com/wp-content/uploads/2022/02/Moscow-Creative-Resume-Template.pdf>
<https://www.resumeviking.com/wp-content/uploads/2022/02/Amsterdam-Modern-Resume-Template.pdf>
<https://www.resumeviking.com/wp-content/uploads/2022/02/Madrid-Resume-Template-Modern.pdf>
<https://www.resumeviking.com/wp-content/uploads/2022/02/Santiago-Resume-Template-Professional.pdf>
<https://www.resumeviking.com/wp-content/uploads/2023/04/Amsterdam-Modern-Resume-Template-1.pdf>
<https://www.resumeviking.com/wp-content/uploads/2022/02/Oslo-Resume-Template-Modern.pdf>
<https://www.resumeviking.com/wp-content/uploads/2022/02/Cape-Town-Resume-Template-Retro-Creative.pdf>
<https://www.resumeviking.com/wp-content/uploads/2022/02/Paris-Resume-Template-Modern.pdf>
<https://www.resumeviking.com/wp-content/uploads/2022/02/Berlin-Simple-Resume-Template.pdf>
<https://www.resumeviking.com/wp-content/uploads/2022/02/Geneva-Resume-Template-Retro-Simple.pdf>
<https://www.resumeviking.com/wp-content/uploads/2022/02/Vancouver-Creative-Resume.pdf>
<https://www.resumeviking.com/wp-content/uploads/2022/02/Tokyo-Modern-Resume-Template.pdf>
<https://www.resumeviking.com/wp-content/uploads/2022/02/Milan-Resume-Template-Professional.pdf>
<https://www.resumeviking.com/wp-content/uploads/2022/02/Lisbon-Resume-Template-Creative.pdf>
<https://www.resumeviking.com/wp-content/uploads/2022/02/Barcelona-Resume-Example-Professional.pdf>

After discussions with the HR representative and my internship supervisor, as well as a thorough analysis of the collected resumes, we finalized the key features to be extracted. The selected features are as follows:



3- data Preparation

```
"cv (1).pdf": "# Farah Ben Slimen - Resume\n\n# Personal Information:\n\nName: Farah Ben Slimen\n\nPhone Number: 28 707 510\n\nEmail Address: farah.benslimen@eniso.u-sousse.tn\n\nPlace: Bizerte, Manzel Bourguiba\n\n# Summary:\nEngineering student specializing in Mechatronics with a strong academic background and hands-on project experience.\n\n# Education:\n\nInstitution: BACCALAUREAT\nDate: 2020-2021\nDegree: Mentioned with honors\n\nInstitution: CYCLE PREPARATOIRE SCIENTIFIQUE at IPEIB\nDate: 2021-2023\nDegree: Ranked 494/1440 in the national entrance exam for engineering schools\n\nInstitution: CYCLE D'INGENIEUR at Ecole Nationale d'Ingénieur de Sousse\nDate: 2023-2024\n\n# Internship and Work Experience:\n\nDate: 2024 (Semester Project)\n\nTechnologies: AxiDraw\n\nResponsibilities: Developed a precision programmable plotter capable of drawing or writing on various surfaces with high accuracy.\n\nOrganization: Academic Project\n\n# Projects:\n\nName: Robotic Arm\n\nTechnologies: Robotics\n\nDescription: Developed a robotic arm under the guidance of Eniso Team Robotics Club.\n\nSkills:\n\nLanguages: C, SolidWorks\nProject Management\nPublic Relations\nTeamwork\nTime Management\n\nLanguages:</h7>\n\nFrench: Fluent\nEnglish: Fluent\nArabic: Native\nItalian: Beginner\n\nInterests and Hobbies:</h8>\nSports\nMusic: Listening to and playing the violin\nReading novels\n\nVolunteer Work:</h9>\n\nOrganization: Eniso Enterprise Convergence Forum V12\n\nResponsibilities: Active member\nPosition: Eniso Smart Challenge V8.0\n\nOrganization: Eniso Team Robotics Club\n\nResponsibilities: Member\n\nOrganization: EUREKA Eniso Cultural Club\n\nResponsibilities: Member\n\nCertification: SOLIDWORKS Associate (CSWA) - Validates core competencies in 3D modeling and the use of SOLIDWORKS software."
```

Farah Ben Slimen

Elève ingénieur en génie Mécaélectronique

Education

- 2020-2021 BACCALAUREAT avec la mention bien
- 2021-2023 CYCLE PRÉPARATOIRE SCIENTIFIQUE à l'IPEIB, rang 494/1440 au concours national d'entrée aux écoles d'ingénieurs
- 2023-2024 CYCLE D'INGENIEUR à l'école nationale d'ingénieur de sousse

Projet Académique

2024-PROJET SEMESTRIEL

L'AxiDraw : un traceur de précision programmable capable de dessiner ou d'écrire sur une variété de surfaces avec une grande précision.

PROJET DE CLUB

Robotic Arm encadré par le club robotique eniso Team

Centre d'intérêt

Sport
Musique : écouter et jouer du violon
Lire des Romans

Expériences Associatives

- Membre d'organisation : Forum de convergence eniso entreprise V12 ENISO Smart Challenge V8.0
- Membre Actif : Club robotique Eniso Team ACM Eniso Club Culturelle EUREKA Eniso

Compétences

Langage C
SolidWorks
Gestion de projet
Relations publiques
Travail en équipe
Gestion du temps

Certificat

Certifié SOLIDWORKS Associate (CSWA) : Validation des compétences de base en modélisation 3D et utilisation du logiciel SOLIDWORKS.

For data extraction, we used **LlamaParse** because it showed the best results compared to Python libraries like PDFMiner.

We used the **dateparser** library to accurately extract dates, even when they appear in various formats. Additionally, the **python-Levenshtein** library helps us compare strings to match skills from the resume with predefined keywords in the projects, internships, and work experience sections. By combining these tools, we can effectively link skills to their corresponding experience timelines, improving the overall quality of resume parsing and making the skills more relevant in the final output.

```
"skills": {  
    "Java": "N/A",  
    "Scala": "N/A",  
    "Python": "N/A",  
    "C": "N/A",  
    "SQL": "N/A",  
    "Hadoop": "N/A",  
    "MapReduce": "N/A",  
    "Hive": "N/A",  
    "MySQL": "N/A",  
    "DuckDB": "0, 1, 0",  
    "MongoDB": "0, 5, 0",  
    "PostgreSQL": "N/A",  
    "AirByte": "N/A",  
    "Kafka": "N/A",  
    "RabbitMQ": "0, 6, 0",  
    "dbt": "0, 1, 0",  
    "Power BI": "N/A",  
    "Docker": "0, 6, 0",  
    "Node.js": "0, 5, 0",  
    "React.js": "0, 5, 0",  
    "FastAPI": "0, 3, 0",  
    "Spring": "N/A",  
    "Spring Boot": "0, 6, 0"
```

We used the **fitz (PyMuPDF)** library to extract both the links and their corresponding text, while the **urllib.parse** module helps in parsing the URLs and extracting the domains. The purpose is to specifically identify links to platforms like GitHub, LinkedIn, or personal project websites, giving HR teams valuable insights into the candidate's work and online presence.

```
"links": [
  {
    "URI": "https://www.linkedin.com/in/abdallah-amir-0b93101b8/",
    "Type": "LinkedIn"
  },
  {
    "URI": "https://github.com/AmirAbda",
    "Type": "GitHub"
  },
  {
    "URI": "https://x.com/abdallaham56721",
    "Type": "Other"
  },
  {
    "URI": "https://enetcom.rnu.tn/fr",
    "Type": "Other"
  },
  {
    "URI": "https://ipeis.rnu.tn/",
    "Type": "Other"
  },
  {
    "URI": "https://www.tunisitelecom.tn/particulier/",
    "Type": "Other"
  },
  {
    "URI": "https://medium.com/@amir21abdallah",
    "Type": "Other"
  }
]
```

4- Modeling

For key feature extraction, we used an **LLM-based agent** to automate the extraction of key information from resumes.

The process begins with extracting text from PDF files and translating any non-English content into English using the **Google Translator API** for consistency. A detailed message guides the LLM in structuring the required information, which consists of a list of dictionaries outlining the extraction task.

For the LLM, we used the Groq API, utilizing the lightweight LLaMA 3-8B-8192 model, which efficiently processes extensive contexts with high precision.

```
messages = [
    {"role": "system",
     "content": """
Extract the following information from the resume text:
- first and last name
- contact (email, phone number, location, LinkedIn, GitHub)
- summary
- languages
- skills(can you put all the skills found in th resume in list form)
- education (institution, duration, degree)
- internship (duration, technologies, responsibilities, organization name)
- work experience (duration, technologies, responsibilities, organization name)
- projects (title, technologies, description, duration)
- volunteer work (organization name, responsibilities, position)
- certifications
- interests and hobbies

Provide the output as a JSON document with fields 'first and last name', 'contact', 'summary', 'languages', 'skills', 'education', 'internship', 'work experience', 'projects', 'volunteer work', 'certifications', and 'interests and hobbies'. If a field is not present in the text, return an empty string.
"""
    },
    {"role": "user", "content": f"Here is the extracted text: {text}"}
]
response = predict(messages)
```

General Context

Problematic

Proposed Solution

Realization

Conclusion and Perspectives

```
{'skills': {'skills': ['Java',  
    'Scala',  
    'Python',  
    'C',  
    'Hadoop',  
    'Apache Kafka',  
    'SQL',  
    'MongoDB',  
    'Firebase',  
    'Stack MERN',  
    'Power BI',  
    'Google Sheets']},  
'contact': {'name': 'HAMMOUDI WISSEM',  
    'email': 'wissam25@gmail.com',  
    'phone': '+216 56 766 351',  
    'location': 'Tunis'},  
'projects': [{  
    'name': 'Projet Fin d'année',  
    'description': "Conception et développement d'une application de gestion de présence des étudiants en utilisant le stack MERN. Intégration d'un modèle de reconnaissance faciale basé sur CNN à l'aide de FastAPI.",  
    'technologies': ['MERN'],  
    'name': 'Site Web de Blog',  
    'description': 'Participer à la réalisation de partie back et front.',  
    'technologies': ['MERN'],  
    'name': 'Projet Power BI',  
    'description': "Conception d'un tableau de bord interactif pour analyser la performance des employés et identifier les tendances ainsi que les causes potentielles de départ des employés.",  
    'technologies': [],  
    'name': 'Chatbot en utilisant Retrieval Augmented Generation',  
    'description': "Prétraitement et embedding du texte d'un PDF. Utilisation du dot-product pour la recherche de similarité. Améliorer les résultats du LLM pré-entraîné Google/GEMMA-2B-i en utilisant les résultats trouvés grâce à la recherche de similarité.",  
    'technologies': [],  
    'education': [{"degree": "Étudiant en deuxième année d'ingénierie des données et systèmes décisionnels",  
        'institution': "Ecole Nationale d'Electronique et des Télécommunications de Sfax",  
        'graduation_year': ''}],  
    'interests': {'interests_and_hobbies': []},  
    'languages': {'languages': []},  
    'internships': [{"date": "1er juillet au 31 juillet 2023",  
        'organization': 'Aprilium',  
        'technologies': ['SQL Server', 'Power BI'],  
        'responsibilities': ["Implémentation de la capture de changements de données avec SQL Server : comparaison entre le CDC basé sur les logs et le CDC basé sur les déclencheurs afin de choisir la méthode la plus adéquate en termes de performance.", "Réalisation d'un tableau de bord pour évaluer les données capturées en utilisant Power BI."]},  
    'certifications': {},  
    'volunteer_work': [{"position": 'Responsable projet',  
        'organization': 'Enet'com junior entreprise',  
        'responsibilities': ["Assurer une communication claire et efficace avec les parties prenantes internes et externes pour garantir une compréhension précise des exigences du projet et la satisfaction du client.", "Planification et gestion des projets.", "Intégration de Google Sheets dans le processus de gestion de projet pour gagner du temps et améliorer la prise de décision."]}],  
    'work_experience': {}}}
```

HAMMOUDI WISSEM
Etudiant en deuxième année d'ingénierie des données et systèmes décisionnels

+216 56 766 351
wissam25@gmail.com
Tunis

A PROPOS
Etudiant en deuxième année d'ingénierie des données et systèmes décisionnels. Je suis passionné par l'analyse et la gestion des données massives. Je souhaite promouvoir la culture de prise de décision basée sur l'analyse et les preuves.

EDUCATION
Chatbot en utilisant Retrieval Augmented Generation
École Nationale d'Electronique et des Télécommunications de Sfax
Étudiant en deuxième année d'ingénierie des données et systèmes décisionnels

COMPÉTENCES
Langages de Programmation: Java, Scala, Python, C, Technologies Big Data: Hadoop, Outils d'Intégration de Données: Talend, Apache Kafka, Base de Données et Langage de Requête: SQL, MongoDB, MySQL, Outils de Visualisation de Données: Power BI, Google Sheets

VIE SOCIALE
Enef'com junior entreprise
Responsable projet | 2023 - Présent
Assurer une communication claire et efficace avec les parties prenantes internes et externes pour garantir une compréhension précise des exigences du projet et la satisfaction du client.
Planification et gestion des projets.
Intégration de Google Sheets dans le processus de gestion de projet pour gagner du temps et améliorer la prise de décision.

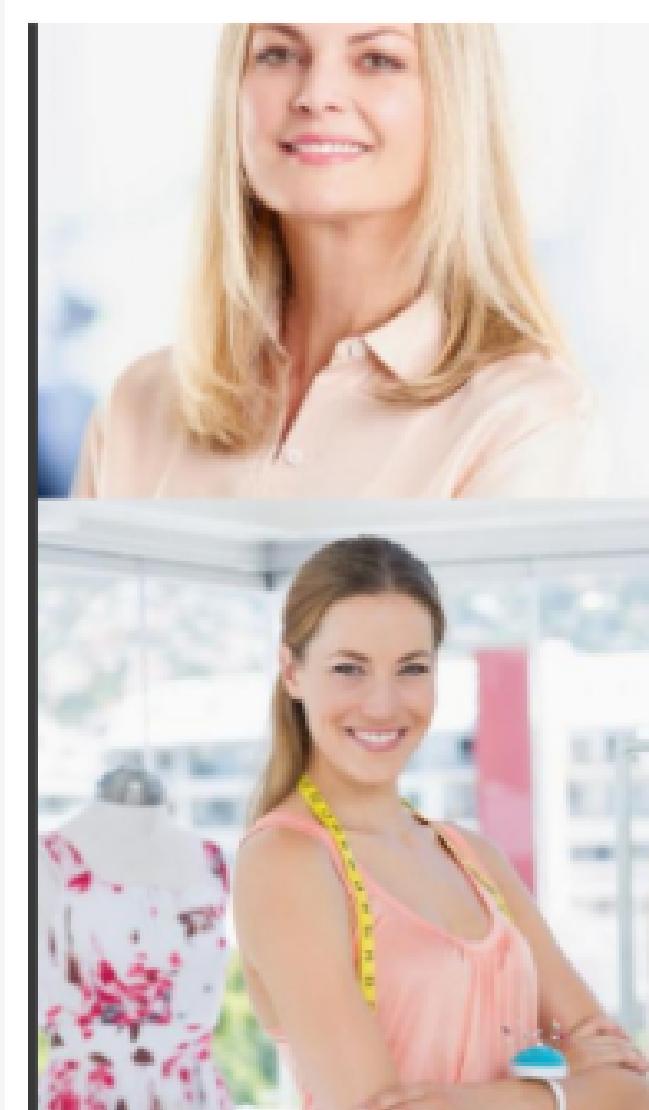
PROJET
Project Fin d'année
Conception et développement d'une application de gestion de présence des étudiants en utilisant le stack MERN
Intégration d'un modèle de reconnaissance faciale basé sur CNN à l'aide de FastAPI.

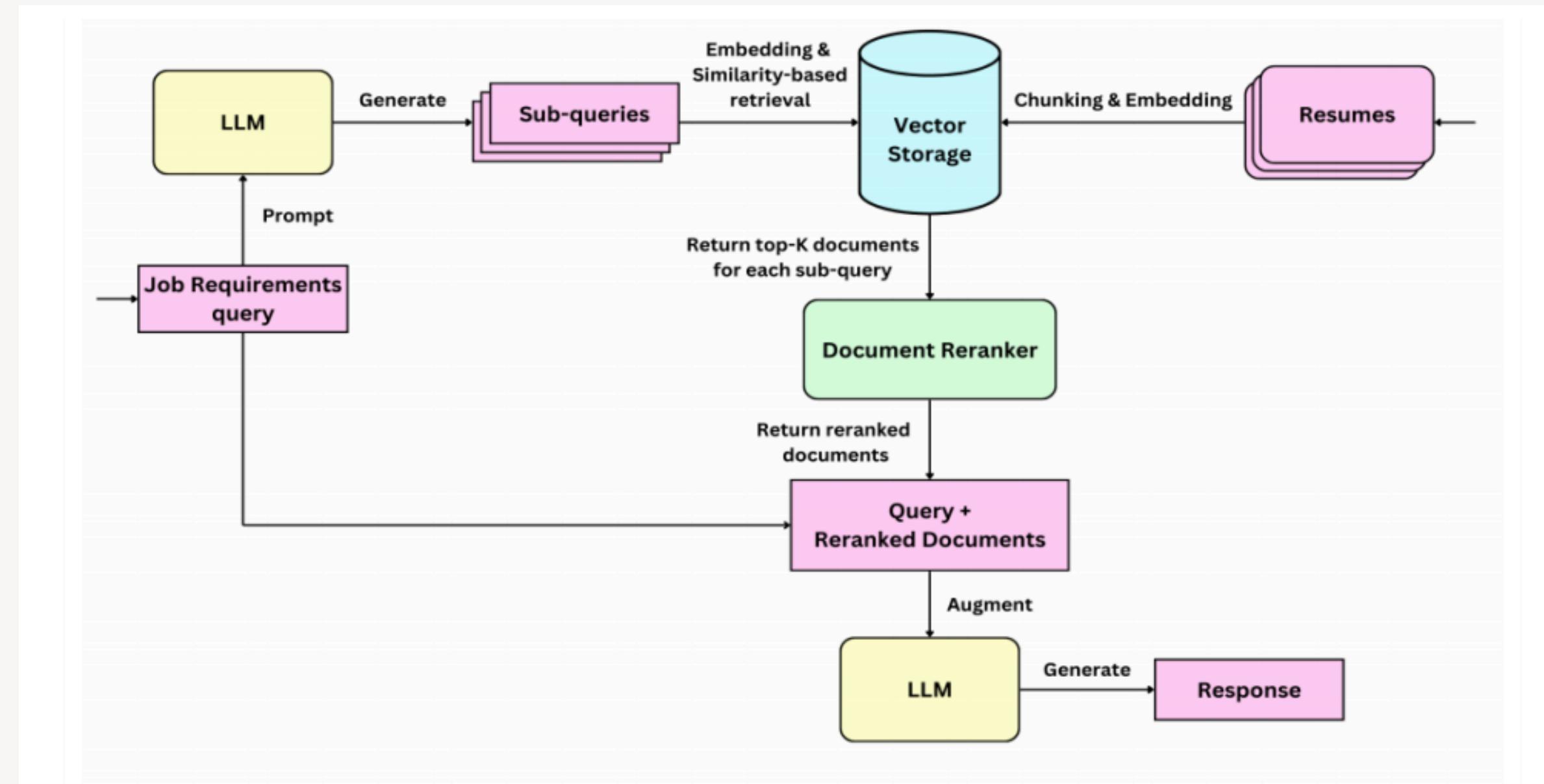
Site Web de Blog (MERN)
Participer à la réalisation de partie back et front.

Project Power BI
Conception d'un tableau de bord interactif pour analyser la performance des employés et identifier les tendances ainsi que les causes potentielles de départ des employés.

STAGE D'ETE
Aprilium
Stage | 1er juillet au 31 juillet 2023
Implémentation de la capture de changements de données avec SQL Server : comparaison entre le CDC basé sur les logs et le CDC basé sur les déclencheurs afin de choisir la méthode la plus adéquate en termes de performance.
Réalisation d'un tableau de bord pour évaluer les données capturées en utilisant Power BI.

MobileNetSSD_deploy.caffemodel, a pre-trained model designed specifically for object detection within the MobileNet SSD framework. We chose this model for its lightweight architecture and excellent balance between speed and accuracy, making it suitable for our needs. It processes images in the resume and returns only those where a person is detected, ensuring efficient detection with minimal computational overhead.





The chatbot uses RAG Fusion, which combines generative agents with similarity-based retrieval methods to enhance response quality. RAG Fusion is particularly effective at managing complex human queries, making it very useful in recruitment situations where job descriptions often have varied requirements.

The process of generating sub-queries starts by inputting user queries into a Large Language Model (LLM) agent. This allows complex job requirements to be broken down into specific sub-queries that focus on individual aspects.

This breakdown is achieved using a carefully designed prompt that consists of a fixed system prompt for consistent guidance and a dynamic user prompt tailored to the specific job requirement. This approach ensures that the LLM analyzes job requirements like an expert recruiter, relying solely on the provided information to minimize inaccuracies.

```
system_message = """  
You are an expert in talent acquisition. Separate this job description into 3-4 more focused  
aspects for efficient resume retrieval.  
Make sure every single relevant aspect of the query is covered in at least one query.  
You may choose to remove irrelevant information that doesn't contribute to finding resumes.  
Only use the information provided in the initial query. Do not make up any requirements of your own.  
Put each result in one line, separated by a linebreak.  
"""  
  
user_message = f"""  
Generate 3 to 4 distinct sub-queries based on this initial job description:  
{question}  
"""
```

General Context

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Proposed Solution

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```
job_description = """
**Job Title: MERN Web Developer**

**Location:** New York City, NY
**Company:** Tech Innovations Inc.

**About Us:**  
Tech Innovations Inc. is a leading web development and software engineering company focused on building cutting-edge web applications using the latest technologies. Our mission is to help businesses enhance their online presence and deliver exceptional user experiences. We work with a diverse range of clients from various industries including e-commerce, healthcare, and non-profit.

**Position Overview:**  
We are seeking a highly skilled and motivated MERN Web Developer to join our dynamic team. The ideal candidate will have extensive experience in building full-stack web applications using the MERN (MongoDB, Express.js, React.js, Node.js) stack. You will work closely with our clients and internal teams to design, develop, and deploy robust and scalable web applications.

**Key Responsibilities:**  

- **Application Development:** Design, develop, and deploy web applications using the MERN stack.  

- **Front-end Development:** Build engaging and responsive user interfaces using React.js and modern front-end technologies.  

- **Back-end Development:** Develop server-side logic and APIs using Node.js and Express.js.  

- **Database Management:** Implement and manage MongoDB databases to store and retrieve data.  

- **Collaboration:** Work with cross-functional teams to understand business requirements and translate them into technical solutions.  

- **Continuous Improvement:** Stay updated with the latest web development frameworks, tools, and best practices.

**Qualifications:**  

- **Education:** Bachelor's or Master's degree in Computer Science, Information Technology, or a related field.  

- **Experience:** 3+ years of experience as a MERN Web Developer with a strong portfolio of successful web application projects.  

- **Technical Skills:**  

  - Proficient in React.js, Node.js, Express.js, and MongoDB.  

  - Familiarity with modern front-end technologies like HTML5, CSS3, and JavaScript.  

  - Experience with database design, query optimization, and schema management.  

  - Familiarity with version control systems like Git and code collaboration tools.  

- **Analytical Skills:** Strong problem-solving and critical thinking abilities with a keen eye for detail.  

- **Communication:** Excellent verbal and written communication skills to interact with both technical and non-technical stakeholders.  

- **Teamwork:** Ability to work collaboratively in a fast-paced environment and contribute to cross-functional teams.

"""


```

Sub-Queries:

Here are the 4 sub-queries based on the initial job description:

MERN Web Developer

MongoDB, Express.js, React.js, Node.js

3+ years of experience as a MERN Web Developer

Bachelor's or Master's degree in Computer Science, Information Technology, or a related field

MERN Web Developer with a strong portfolio of successful web application projects

Strong problem-solving and critical thinking abilities

Familiarity with modern front-end technologies like HTML5, CSS3, and JavaScript

Node.js, Express.js, MongoDB, React.js, JavaScript, HTML5, CSS3, Git

The system utilizes the all-MiniLM-L6-v2 model, a lightweight sentence transformer, for text representation in semantic search tasks, striking a balance between high performance and speed. To enhance information retrieval, documents are divided into smaller segments, which is particularly beneficial for lengthy resumes. The system employs recursive chunking, iteratively segmenting the text based on predefined separators to create manageable pieces of approximately 1,024 characters, with a 50% overlap to preserve context between chunks.

Model Name	Performance Sentence Embeddings (14 Datasets)	Performance Semantic Search (6 Datasets)	Avg. Performance	Speed	Model Size
all-mpnet-base-v2	69.57	57.02	63.30	2800	420 MB
multi-qa-mpnet-base-dot-v1	66.76	57.60	62.18	2800	420 MB
all-distilroberta-v1	68.73	50.94	59.84	4000	290 MB
all-MiniLM-L12-v2	68.70	50.82	59.76	7500	120 MB
multi-qa-distilbert-cos-v1	65.98	52.83	59.41	4000	250 MB
all-MiniLM-L6-v2	68.06	49.54	58.80	14200	80 MB
multi-qa-MiniLM-L6-cos-v1	64.33	51.83	58.08	14200	80 MB
paraphrase-multilingual-mpnet-base-v2	65.83	41.68	53.75	2500	970 MB
paraphrase-albert-small-v2	64.46	40.04	52.25	5000	43 MB
paraphrase-multilingual-MiniLM-L12-v2	64.25	39.19	51.72	7500	420 MB
paraphrase-MiniLM-L3-v2	62.29	39.19	50.74	19000	61 MB
distiluse-base-multilingual-cased-v1	61.30	29.87	45.59	4000	480 MB
distiluse-base-multilingual-cased-v2	60.18	27.35	43.77	4000	480 MB

To efficiently manage and retrieve dense vectors, the system utilizes Facebook AI Similarity Search (FAISS). The resume embeddings and original text chunks are indexed into a vector space using a flat index that prioritizes accuracy over speed, ensuring reliable retrieval.

Cosine distance is employed as the similarity measure. FAISS retrieves the most similar resume chunks for each sub-query and ranks them accordingly. To enhance the final document rankings, Reciprocal Rank Fusion (RRF) aggregates the inverse ranks from multiple lists into a new score for each document. This process produces a re-ranked list of documents that accurately reflects their relevance.

```
('17', 0.08095156778558418)
('25', 0.08090957165520889)
('20', 0.06639344262295081)
('21', 0.06426850662704703)
('8', 0.05)
('12', 0.04841269841269841)
('0', 0.03252247488101534)
('13', 0.032266458495966696)
('10', 0.01639344262295082)
('23', 0.016129032258064516)
('9', 0.016129032258064516)
('1', 0.015625)
('14', 0.015625)
```

The system utilizes the same language model as the resume parser, focusing on key parameters like temperature to manage creativity. A lower temperature setting of 0.1 is applied to enhance consistency and reduce randomness in the outputs.

To improve retrieval efficiency, the system employs a small-to-big retrieval method. This approach first retrieves smaller text chunks and then uses metadata to access the complete resumes, ensuring effective information gathering.

The prompt design integrates job descriptions with re-ranked resumes and chat history. It instructs the model to summarize relevant resumes and provide reasons for its selections. The system prompt offers general guidance and assigns a specific role, such as "You are an expert in talent acquisition," while emphasizing the importance of using only the provided context to avoid inaccuracies.

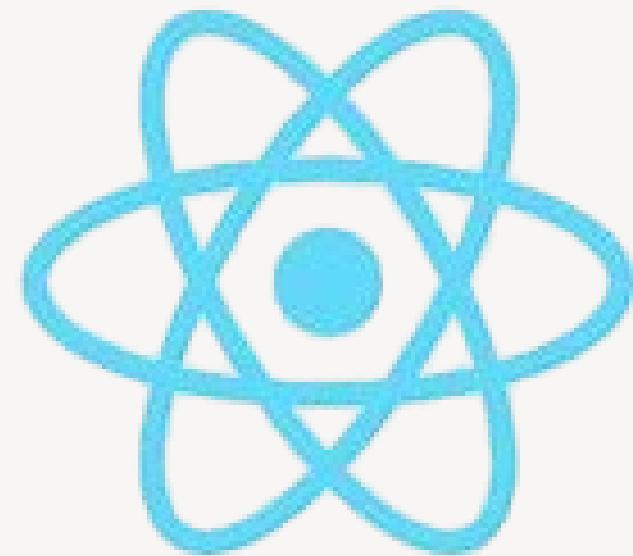
1. Applicant ID 20: Amir Abdallah
 - * Has a strong background in computer science, with a focus on data engineering and decision-making systems.
 - * Has experience with Node.js, Express.js, React.js, and MongoDB, which are mentioned in the job requirements.
 - * Has a robust portfolio of projects, including a chatbot with Retrieval Augmented Generation (RAG) and a microservice architecture app.
 - * Has strong problem-solving and critical thinking abilities, as demonstrated in his projects and volunteer work.
2. Applicant ID 17: Roua Rezgui
 - * Has experience with MongoDB, Express.js, React.js, and Node.js, which align with the job requirements.
 - * Has a strong portfolio of projects, including a platform using MERN Stack, MVC, Responsive Design, and AOS (js).
 - * Has demonstrated ability to work with teams and lead projects, as evident in his internship experiences.
 - * Has strong problem-solving and critical thinking abilities, as demonstrated in his projects and internship experiences.
3. Applicant ID 8: Hammoudi Wissem
 - * Has a strong background in computer science, with a focus on data engineering and decision-making systems.
 - * Has experience with MongoDB, Express.js, and Node.js, which are mentioned in the job requirements.
 - * Has a robust portfolio of projects, including an end-of-year project using MERN and FastAPI, as well as a Power BI project.
 - * Has strong problem-solving and critical thinking abilities, as demonstrated in his projects and volunteer work.
4. Applicant ID 21: Amani Fraj
 - * Has a strong background in computer science, with a focus on telecommunications.
 - * Has experience with programming languages such as Java, Python, and JavaScript, which are relevant to the job requirements.
 - * Has a strong portfolio of projects, including an end-of-year project using deep learning and machine learning.
 - * Has strong problem-solving and critical thinking abilities, as demonstrated in his projects and volunteer work.
5. Applicant ID 25: Hind Ounifi
 - * Has a strong background in telecommunications, with a focus on DevOps.
 - * Has experience with DevOps tools such as GitLab, Jenkins, and ArgoCD, which are relevant to the job requirements.
 - * Has a strong portfolio of projects, including a project on Exploration of GitOps with ArgoCD and a project on Creation of a Java Application with Spring Boot.
 - * Has strong problem-solving and critical thinking abilities, as demonstrated in her projects and internship experiences.

Note that while all of these candidates have strong portfolios and relevant experience, the ranking may vary depending on the specific requirements of the job and the selection criteria.

5- Evaluation

Person Detection	<p>we passed 100 resumes through this pre-trained model. Out of these, 80 resumes contained candidate images, and the model successfully extracted 78 images, achieving an accuracy of 97.5%.</p>
Features Extraction	<p>We encountered several issues with feature extraction. In the education section, the tool sometimes struggled to accurately identify degrees, especially when not explicitly mentioned, and occasionally repeated the school name. For the internship and project sections, it had difficulty extracting all technologies when they were not clearly listed in the descriptions. In the volunteer work section, the tool sometimes misinterpreted responsibilities as job titles, resulting in inaccurate position descriptions.</p>
Chatbot	<p>Inaccurate Information: There were instances where the large language model (LLM) provided incorrect or misleading information about the resumes. This could be due to limitations in the LLM's understanding of context.</p>

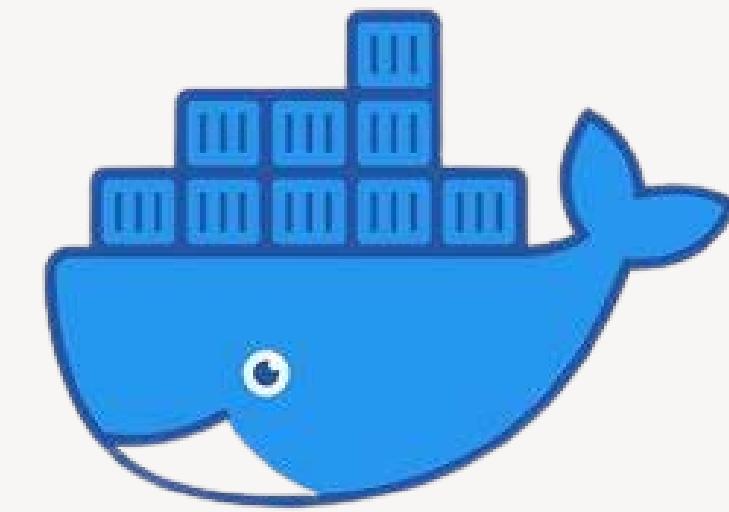
6- Deployment



React JS



Fast API



Docker and Docker Compose

For the Chatbot application we have 3 endpoint:

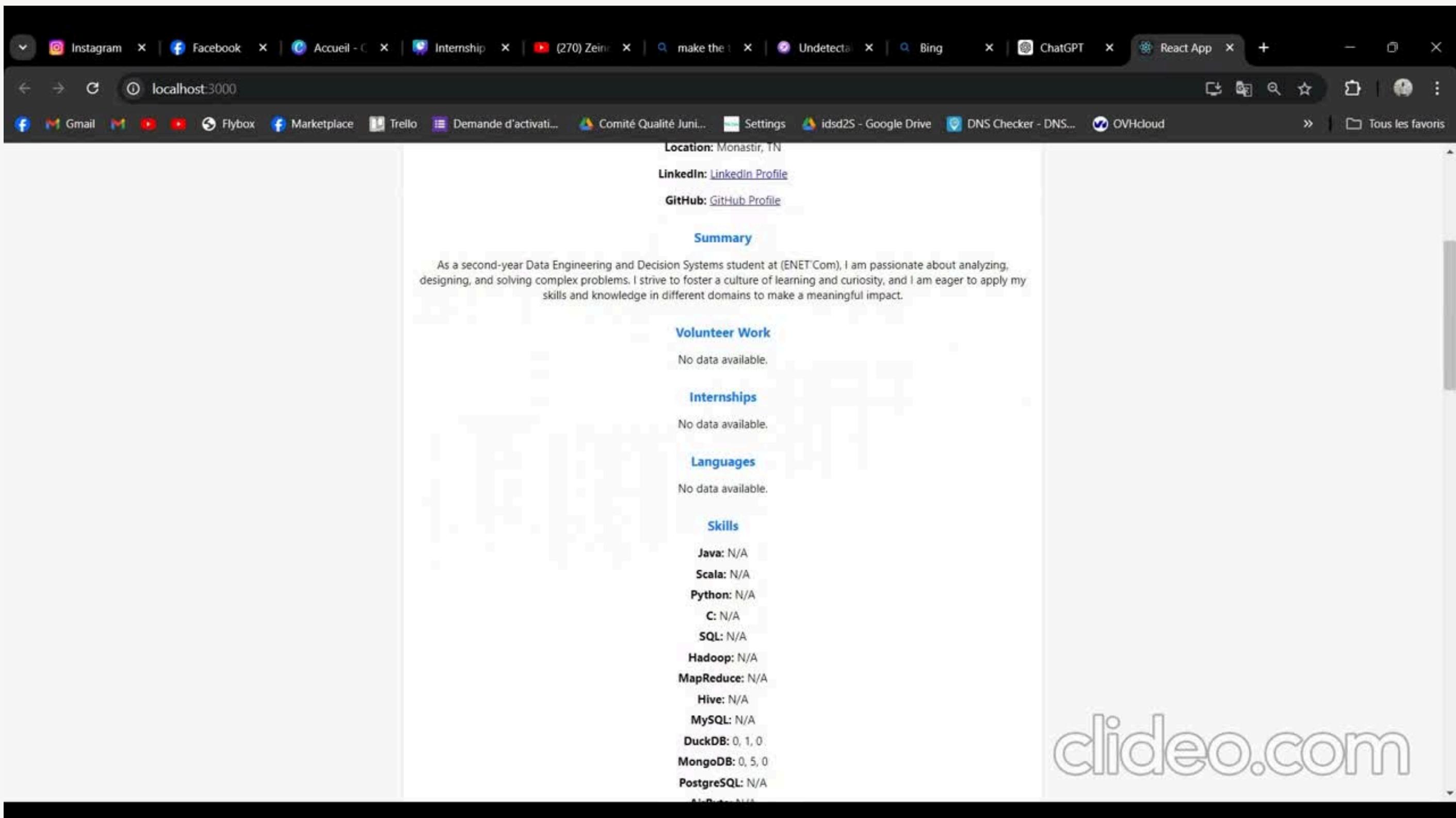
Subquery Generation Endpoint: This endpoint processes a job description to generate subqueries that focus on specific skills, qualifications, and experiences mentioned in the job description.

Resume Retrieval Endpoint: This endpoint retrieves resumes based on the subqueries generated from the job description.

Chatbot Interaction Endpoint: This endpoint allows users to interact with the chatbot to ask questions, request clarifications, or get more information about the resumes and job descriptions.

For the Resume Parser application we have 1 endpoint:

Extract the resume features Endpoint: This endpoint accepts resumes and returns a JSON file containing all the relevant extracted information.



Thank You!

For your attention