# LLM-Powered Distributed Pipeline for Intelligent Job Matching



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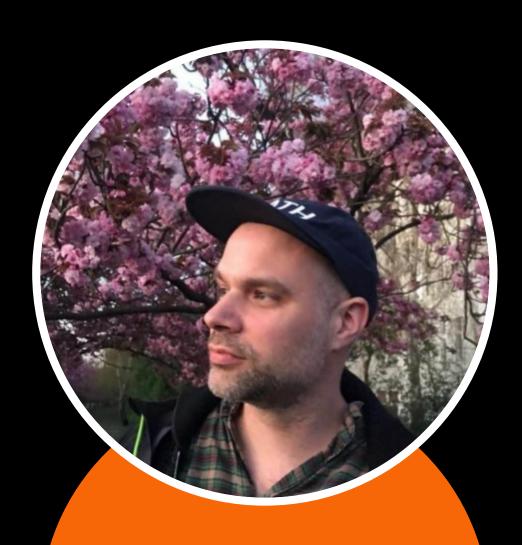
**FOXJOB** 

## TABLE OF CONTENT

- 1 Team introduction
- 2 Job market landscape
- 3 Challenges & Solutions
- 4 Technical approach
- 5 Demo
- 6 Future outlook

# TEAM INTRODUCTION

Konstantin Kaiser



Senior Product Manager & Developer

Ye Zhu



**Senior Product Manager** 

**Zhong Zhao** 



**Product Designer** 

## JOB MARKET

- 1. The job market is more competitive than ever.
- 2. Building a personalized application for jobs that match helps, but takes time and effort.
- 3. Instead of spending time on a personalized application, applicants are busy decoding lengthy job descriptions to find out if they are even worth their time.

#### Applicants for this job

2,018 Applicants

116 Applicants in the past day

#### Applicant seniority level

50% Senior level applicants

30% Entry level applicants

8% Director level applicants

7% Manager level applicants

#### Applicant education level

25% have a Master of Business Administration

19% have a Bachelor's Degree

17% have a Bachelor of Science

39% have other degrees

## CHALLENGE 1 & SOLUTION

Challenge: Job filters rely on basic keyword matching, making search slow and inefficient.

Solution: Use LLMs for meaning-based job matching.

#### Top job picks for you

Based on your profile, preferences, and activity like applies, searches, and saves

216 results



UX Designer, Artificial General Intelligence (AGI)
Alexa Information

X

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Amazon · Sunnyvale, CA

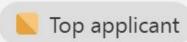
Viewed · Promoted



3D Artist, Horizon 🤡

 $\mathsf{Meta} \cdot \mathsf{New} \; \mathsf{York}, \, \mathsf{NY}$ 

\$149K/yr - \$205K/yr



Saved · Promoted



Visual Designer & Brand Strategist, Undiscovered and Small Business Accelerator (USBA)

Amazon · Seattle, WA

\$127.8K/yr - \$211.2K/yr

Promoted



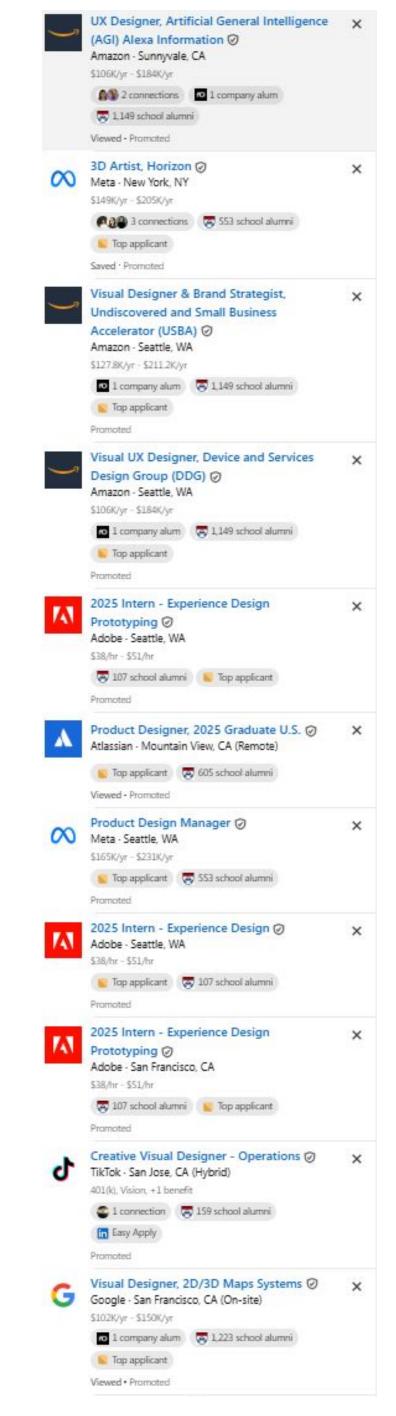
Amazon · Seattle, WA

## CHALLENGE 2 & SOLUTION

Challenge: Information overload in job postings slows decision-making.

Solution:

Use LLMs to create standardized job summaries and scores to filter out mismatches fast.





#### About the job

#### Description

Join Amazon's innovative AGI Alexa Information team and shape the future of AI experiences. As a UX Designer, you'll create cutting-edge user interfaces for our cloud-based intelligent voice assistant, Alexa, and contribute to high-profile consumer experiences.

Show all

At Amazon, we're at the forefront of transformative AI, pioneering state-of-the-art AI and machine learning models to enhance customer experiences worldwide. We're entering a new era where AI promises to reshape society and business in unprecedented ways. You'll have the opportunity to collaborate with our world-class team of AI experts and unlock the next frontiers of Artificial General Intelligence (AGI).

In this role, you'll design intuitive and engaging user interfaces that bridge the gap between advanced AI technology and everyday users. Your work will directly impact customers who interact with Alexa through various devices, including Kindle eReaders, Fire Tablets, Echo devices, and more. You'll be at the heart of innovation, translating complex AI capabilities into user-friendly experiences that delight and empower our customers.

#### Key job responsibilities

- You will be hands on, working alongside a talented team of like-minded UX
  designers, and have a strong understanding of visual systems and best practices,
  including layout, color palette, typography, iconography and illustrations.
- You are at ease visualizing an experience in the abstract, building consensus, and then driving that vision into concise design deliverables.
   You will help foster a customer-obsessed design culture by sharing best practices,
- evangelizing design principles and influencing product strategy

  You are able to define, develop and socialize a clear vision for design innovation
- and big thinking while not sacrificing speed of delivery

  You are a visual storyteller, advocating for design excellence and help create
- meaningful, emotional connection between customers and our products.

   You promote collaboration and facilitate communication with stakeholders at all
- levels and across diverse disciplines and geographies

  You can work cross-functionally to drive elegant design solutions from early
- concept through final implementation and iteration

  You use data and customer insights to confidently share design solutions with
- You use systems-level design thinking to drive design solutions from your team
- You present design work to executive leadership and other senior stakeholders

#### About The Tea

Here at Amazon, we embrace our differences. We are committed to furthering our culture of inclusion. Amazon has ten employee-led affinity groups, reaching 40,000 employees in over 190 chapters globally. We have innovative benefit offerings, and host annual and ongoing learning experiences. Amazon's culture of inclusion is reinforced within our 16 Leadership Principles, which remind team members to seek diverse perspectives, learn and be curious and earn trust.

#### **Basic Qualifications**

- 5+ years of design experience
- 3+ years of delivering design solutions as a UX designer or interaction designer experience
- Visual design expertise demonstrated through mockups and style guides
- An online portfolio with demonstrated evidence of shipping world-class customer experiences that have made a significant impact on business metrics, demonstrating visual craft, vision storytelling, and design systems thinking.
- An understanding of design thinking methodologies to help teams align on usercentered outcomes
- A bias for action in developing new products from inception to launch
- Experience working in a collaborative team and working directly with developers for implementation of designs

#### Preferred Qualifications

- 2+ years of mass-market consumer web / mobile products experience
- Experience prototyping (HTML, XHTML, JavaScript, CSS, Flash or Flash Catalyst, or Axure)

Amazon is committed to a diverse and inclusive workplace. Amazon is an equal opportunity employer and does not discriminate on the basis of race, national origin, gender, gender identity, sexual orientation, protected veteran status, disability, age, or other legally protected status. For individuals with disabilities who would like to request an accommodation, please visit https://www.amazon.jobs/en/disability/us.



## DEMO VIDEO:



## TECHNICAL APPROACH - Overview

## Web Application (Link)

#### Tech Stack:

- Svelte + Firebase
- OAuth2 Authentication

#### Core Features:

- Resume Management
- Assessment Analytics
- Admin Usage Tracking

#### Backend

### Tech Stack:

- Firebase Cloud Functions
- Firestore Database
- LLM API Integration

#### Core Features:

- RAG Processing Pipeline
- PUB/SUB Distribution
- Firestore State Management

## **Chrome-Extension** (Link)

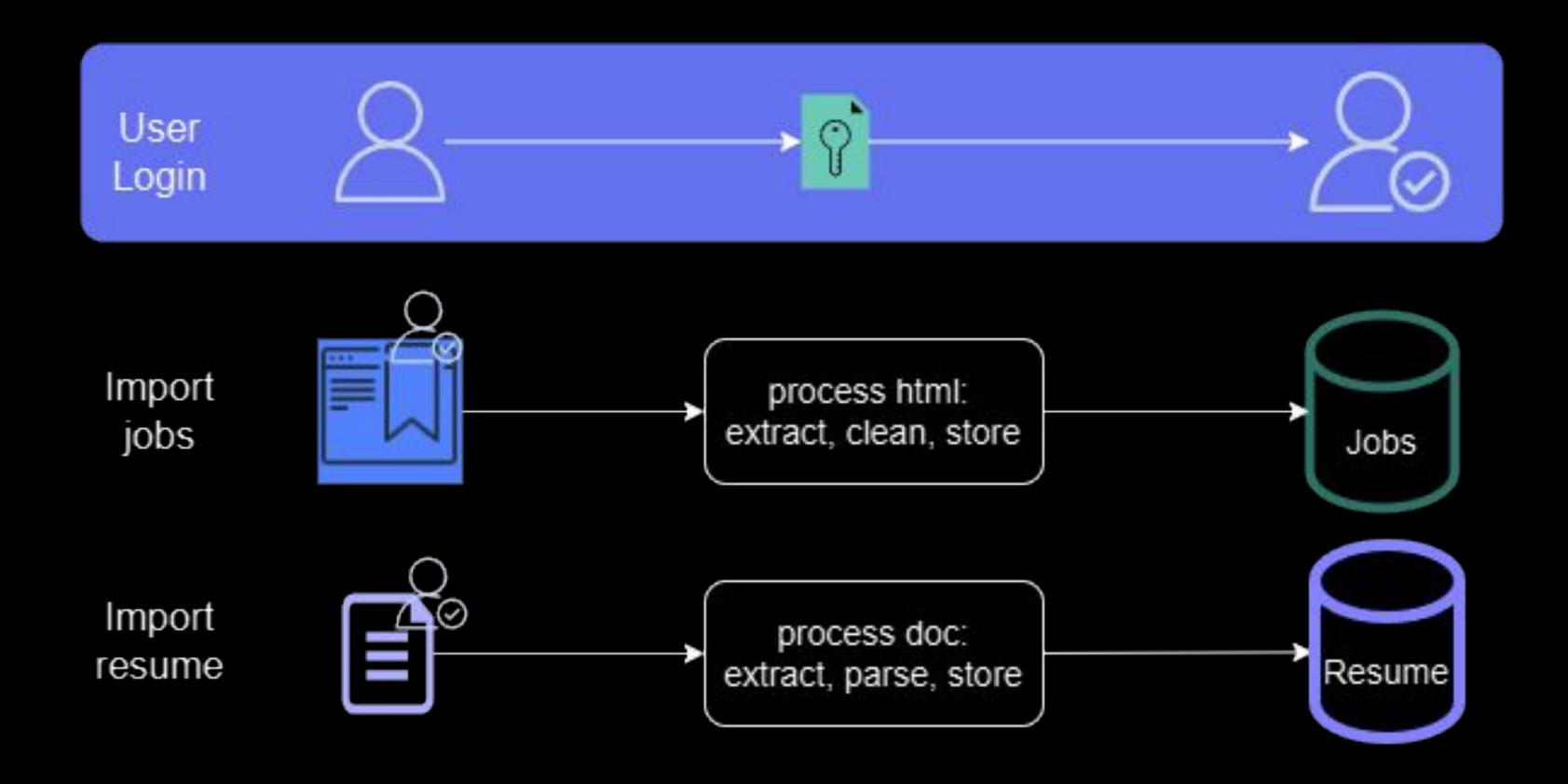
### Tech Stack:

- Vanilla JS + HTML
- OAuth2 Integration

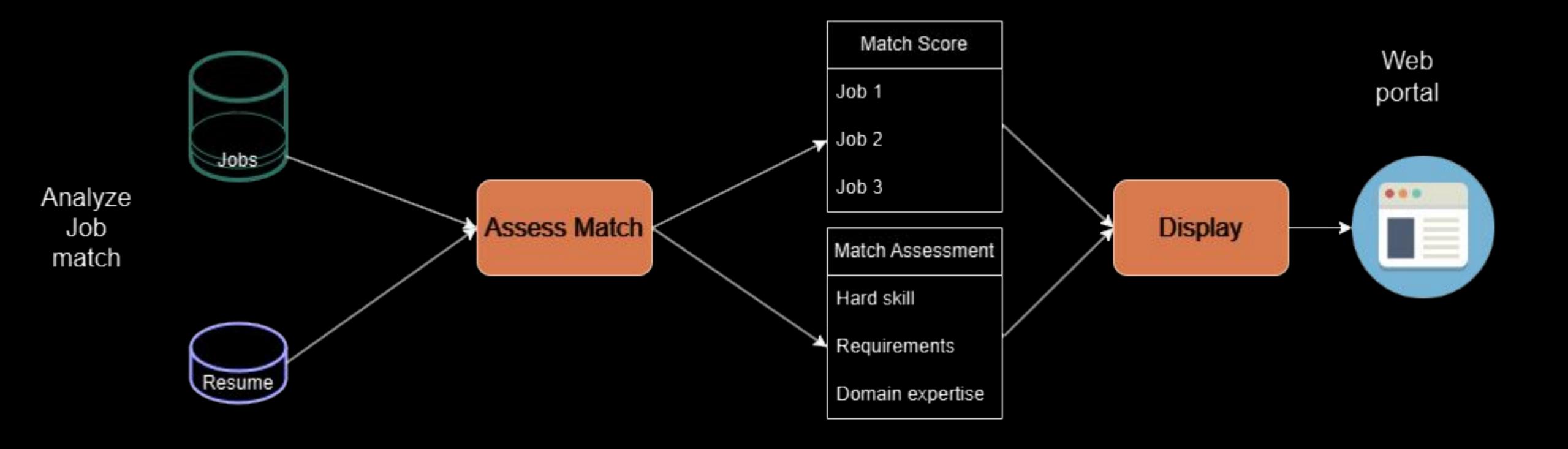
#### Core Features:

- Job Description Scanner
- Web App Library Access

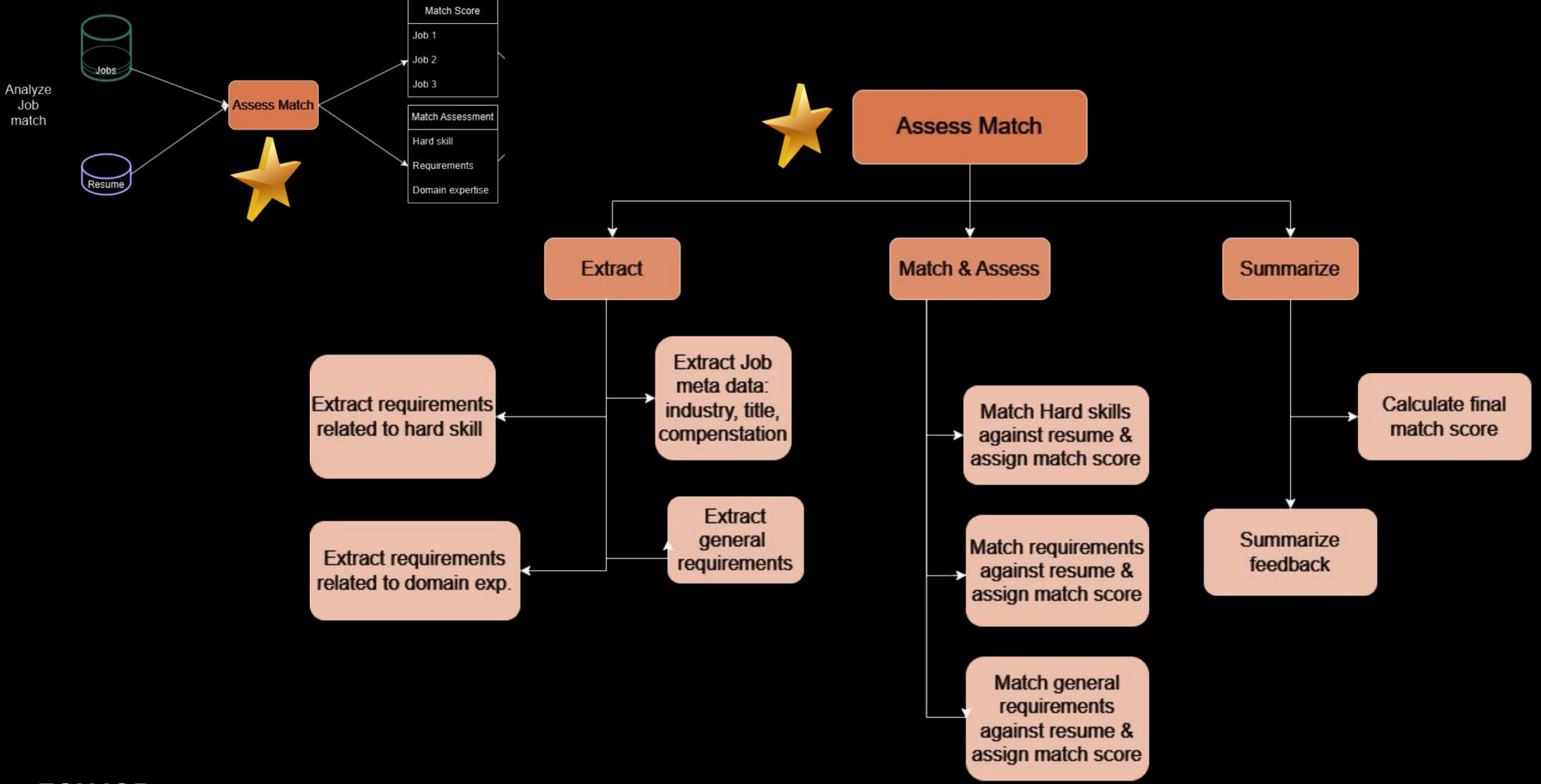
# TECHNICAL APPROACH - Onboarding



# TECHNICAL APPROACH - Job match analysis



# TECHNICAL APPROACH - Match Assessment Pipeline



## ROADMAP: Next sprints

## Long term resume insights

- 1. Create meta-analysis based on multiple job matches
- 2. Find common weaknesses and strengths in resume
- 3. Suggest improvements and offer quantitative guidance

User request:  $\star$ 

## Automated job matching

- Fetch jobs through APIs directly, instead of manually through Chrome-Extension
- Summarize best-finds in a daily personalized message in your inbox.

User request:  $\star$ 

## Add "soft matching"

- Add customizable and highly flexible preferences of applicants.
- Match based on company culture, work ethics, or anything else.

User request: 🛨 🛨

# THANK YOU!

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