



Using AI as a processor for unstructured data to improve the matching of candidate profiles

Janis Kreilis

Cofounder and CEO @ Hyperjob



# The problem

# Head of Capital Markets @ PropTech

France 🇫🇷, Spain 🇪🇸, Italy 🇮🇹, Portugal 🇵🇹

**Real estate** experience

**Debt financing** experience

**Startup** experience

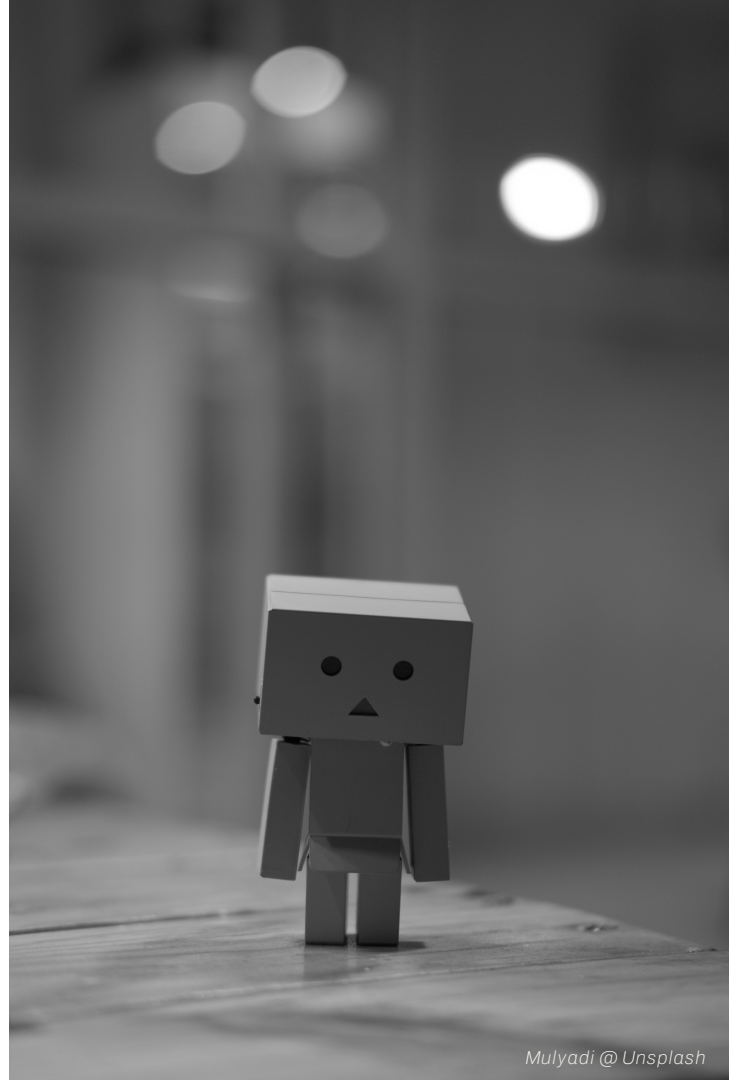
Self-employed

Lived in multiple countries



# What's possible on LinkedIn?

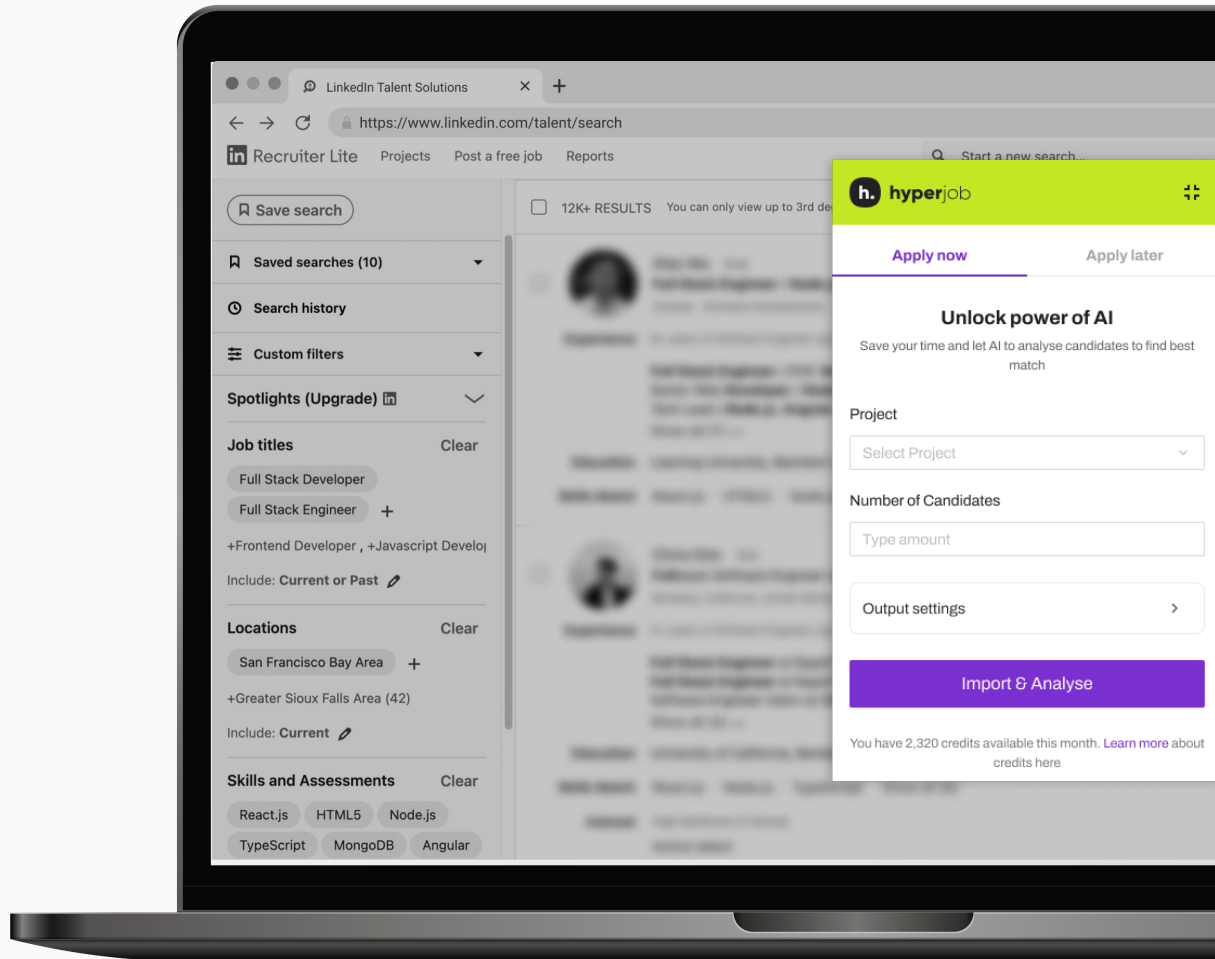
- ✓ France 🇫🇷, Spain 🇪🇸, Italy 🇮🇹, Portugal 🇵🇹
- ✓ **Real estate** experience – **Industry filter**
- ✓ **Debt financing** experience - **“debt”**
- ✗ **Startup** experience
- ✗ Self-employed
- ✗ Lived in multiple countries





**Solution: Hyperscan**

# 1. Import and enrich search results



---

## 2. Ask yes/no questions

**Q1** Does this person have experience with implementing both front-end and back-end solutions?

Fit

**Yes.** This person's involvement in collaborating on responsive designs and optimizing website performance at Tech Innovators Inc. demonstrates experience in both front-end and back-end solutions.



Sales  
prospecting

**Q7** Does this person hold a decision-making position?

**No.** The title of "Senior Account Manager" at BlueSky Dynamics suggests some decision-making authority, but those with budget control usually highlight this in their profile. It is likely they don't have decision-making authority in their current role.

**Q3** Has this person previously exited a startup successfully?

Fit

**Yes.** This person has a successful startup exit in their profile history. They were a co-founder of BrightByte, which was acquired by Nexan Technologies in 2020.



# 3. Get answers from AI

The screenshot displays a recruitment dashboard with the following components:

- Summary:** Scanned and unreviewed (400), Approved (3), Maybe (3), Discarded (3), Unprocessed (23).
- Columns:** Contact, Q1, Q2, Q3, Q4.
- Rows (Candidates):**
  - Alex Smith** (Full Stack Developer): Q1 Fit, Q2 No fit, Q3 Fit, Q4 Fit.
  - Iliana Vetrova** (Full Stack DevOps Engineer): Q1 Fit, Q2 Fit, Q3 Fit, Q4 Fit.
  - Justin Dokidis** (Full Stack Java Developer): Q1 No fit, Q2 Fit, Q3 Fit, Q4 Fit.
  - Erin Philips** (Full Stack PHP Developer): Q1 Fit, Q2 Fit, Q3 No fit, Q4 Fit.
  - Ryan Aminoff** (Full Stack Developer): Q1 Fit, Q2 No fit, Q3 Fit, Q4 Fit.
  - Cheyenne Curtis** (Full Stack Web Developer): Q1 Fit, Q2 Fit, Q3 No fit, Q4 Fit.
  - Nolan Bergson** (Full Stack PHP Developer): Q1 No fit, Q2 Fit, Q3 Fit, Q4 No fit.
- Footer:** Rows per page (50), Showing 1-50 of 400.



# 4. Pick your matches

The image shows a laptop screen with a candidate profile on the left and an AI scan results panel on the right. The profile for Alex Smith, a Full Stack Developer, includes a summary and three work experience entries. The AI scan results panel contains four questions with corresponding fit status and a 'Discard' button.

**Alex Smith**

Passionate Full Stack Developer  
San Francisco, CA, USA

**Experience**

**Summary**  
Enthusiastic Full Stack Developer with a proven track record of spearheading the end-to-end development of dynamic web applications.

**Work experience**

- Full Stack Developer**  
Tech Innovators Inc. · Full-time  
January 2019 - May 2021 · 2 yrs 3 mos  
San Francisco, CA, USA
- Junior Full Stack Developer**  
CodeCraft Solutions · Full-time  
January 2019 - May 2021 · 2 yrs 4 mos  
Seattle, WA, USA
- Front-end Developer Intern**  
WebTech Solutions · Full-time  
June 2017 - December 2018 · 1 yr 6 mos  
Austin, TX, USA

**Notes** **AI scan results**

You have marked profile as Approved. It has been added to the project board.

**Q1** Does this person have experience with both front-end and back-end solutions? **Fit**

**Yes.** Profile indicates collaborating on responsive designs and optimizing website performance demonstrating experience in both front-end and back-end solutions.

**Q2** Has this person held any senior positions? **No fit**

**No.** The positions mentioned suggest varying levels of experience but not explicitly mention a senior role.

**Q3** Has this person taken a leadership role in architecting and implementing solutions for a project? **Fit**

**Yes.** The person mentions "leading the development of a scalable e-commerce platform," indicating a leadership role in architecting and implementing solutions for a project.

**Q4** Does this person have at least 4 years of experience as Full Stack Developer? **Fit**

# Key benefits



**SPEED**

10x faster



**REACH**

Process 1000s



**CONTROL**

Human decides

# Key benefits



**SPEED**

10x faster



**REACH**

Process 1000s



**CONTROL**

Human decides

# Key benefits



**SPEED**

10x faster



**REACH**

Process 1000s



**CONTROL**

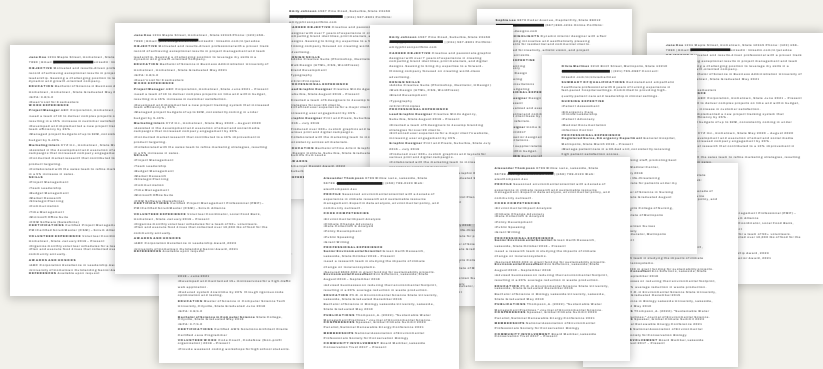
Human decides



# Role of AI

AI as data processor vs AI as a “black box”

# AI as a “black box”



# AI



8.5

Accept



7.5

Accept



6

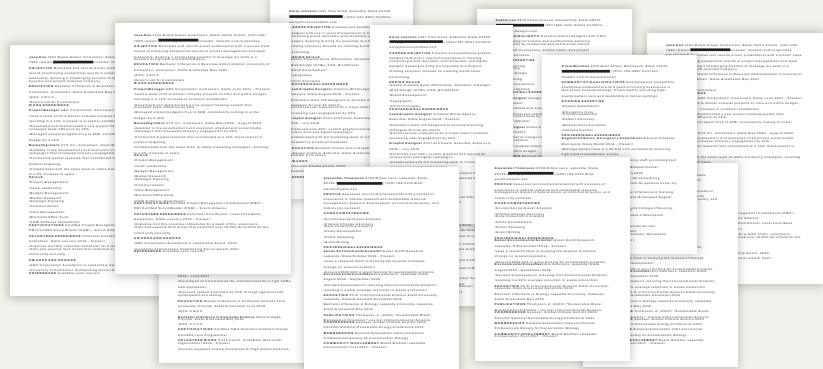
Decline



3

Decline

# AI as unstructured data processor



AI



# Transparency, data, and control

## Hyperscan

✓ Transparent parameters

## Matching AI

✗ “Black box”: unclear parameters



# Transparency, data, and control

## Hyperscan

✓ Transparent parameters

✓ Control over parameters

## Matching AI

✗ “Black box”: unclear parameters

✗ “Black box”: no control over parameters

# Transparency, data, and control

## Hyperscan

✓ Transparent parameters

✓ Control over parameters

✓ Human decides

## Matching AI

✗ “Black box”: unclear parameters

✗ “Black box”: no control over parameters

✗ AI decides

# Transparency, data, and control

## Hyperscan

✓ Transparent parameters

✓ Control over parameters

✓ Human decides

✓ Bias in-check

## Matching AI

✗ “Black box”: unclear parameters

✗ “Black box”: no control over parameters

✗ AI decides

✗ Hidden bias

# Transparency, data, and control

## Hyperscan

✓ Transparent parameters

✓ Control over parameters

✓ Human decides

✓ Bias in-check

✓ Minimum data processed

## Matching AI

✗ “Black box”: unclear parameters

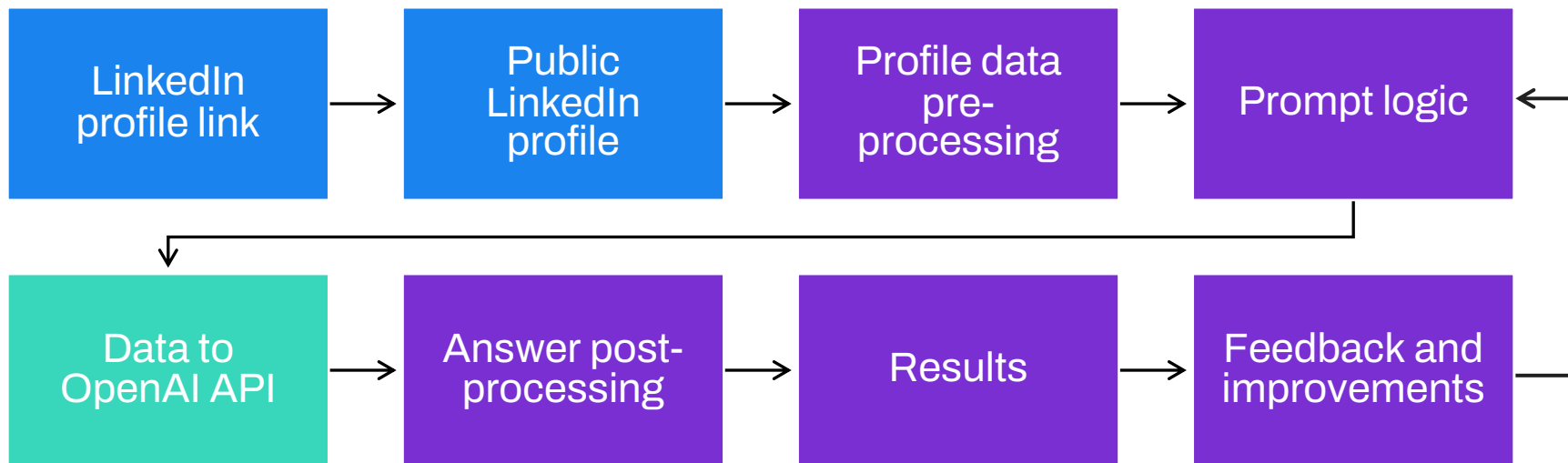
✗ “Black box”: no control over parameters

✗ AI decides

✗ Hidden bias

✗ Large training data volumes needed

# Under the hood



# Positive findings

## **Surfaces great matches**

buried in LinkedIn search results  
(avg #323 in top 30)



# Positive findings

## **Surfaces great matches**

buried in LinkedIn search results  
(avg #323 in top 30)

## **High hit rate**

83% “good fit” for top 30  
candidates for an experienced user





# Positive findings

## **Surfaces great matches**

buried in LinkedIn search results  
(avg #323 in top 30)

## **High hit rate**

83% “good fit” for top 30  
candidates for an experienced user

## **High accuracy rate**

~90% correct answers with current  
prompt logic





# Challenges

## **Data quality and availability**

Getting and pre-processing available public profile data



# Challenges

## **Data quality and availability**

Getting and pre-processing available public profile data

## **Ensuring accuracy**

Correct prompt logic for different types of questions



# Challenges

## **Data quality and availability**

Getting and pre-processing available public profile data

## **Ensuring accuracy**

Correct prompt logic for different types of questions

## **User readiness**

Finding users with necessary digital skills for product success



# Coming soon

 **Different data types = different use cases**

CVs, internal databases





# Coming soon

## **Different data types = different use cases**

CVs, internal databases

## **Accuracy improvements**

Enhanced prompt logic for different types of questions



# Coming soon

## **Different data types = different use cases**

CVs, internal databases

## **Accuracy improvements**

Enhanced prompt logic for different types of questions

## **AI implementation in UI/UX**

- LinkedIn search suggestions from job description
- Question suggestions from job description
- Improved explanation of reasoning



# Coming soon

## **Different data types = different use cases**

CVs, internal databases

## **Accuracy improvements**

Enhanced prompt logic for different types of questions

## **AI implementation in UI/UX**

- LinkedIn search suggestions from job description
- Question suggestions from job description
- Improved explanation of reasoning

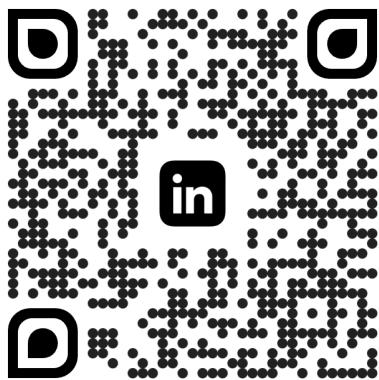
## **Other use cases**

Sales prospecting, investor search, startup search





# Would you like to work together?



[janis@hyperscan.co](mailto:janis@hyperscan.co)

