

# How Deep Social Matchmaking Works



## 1. Comprehensive Social Analysis

Using YOLO-World and CLIP-based model to analyse social media information including posts, photos, likes, etc., primarily from Facebook and Instagram.

This multi-modal approach ensures a detailed understanding of a user's preferences, forming the basis for preference-based matching by analysing vector similarity in the context of travel.



**Building** (97,7%) Ranked 1 out of 12 labels

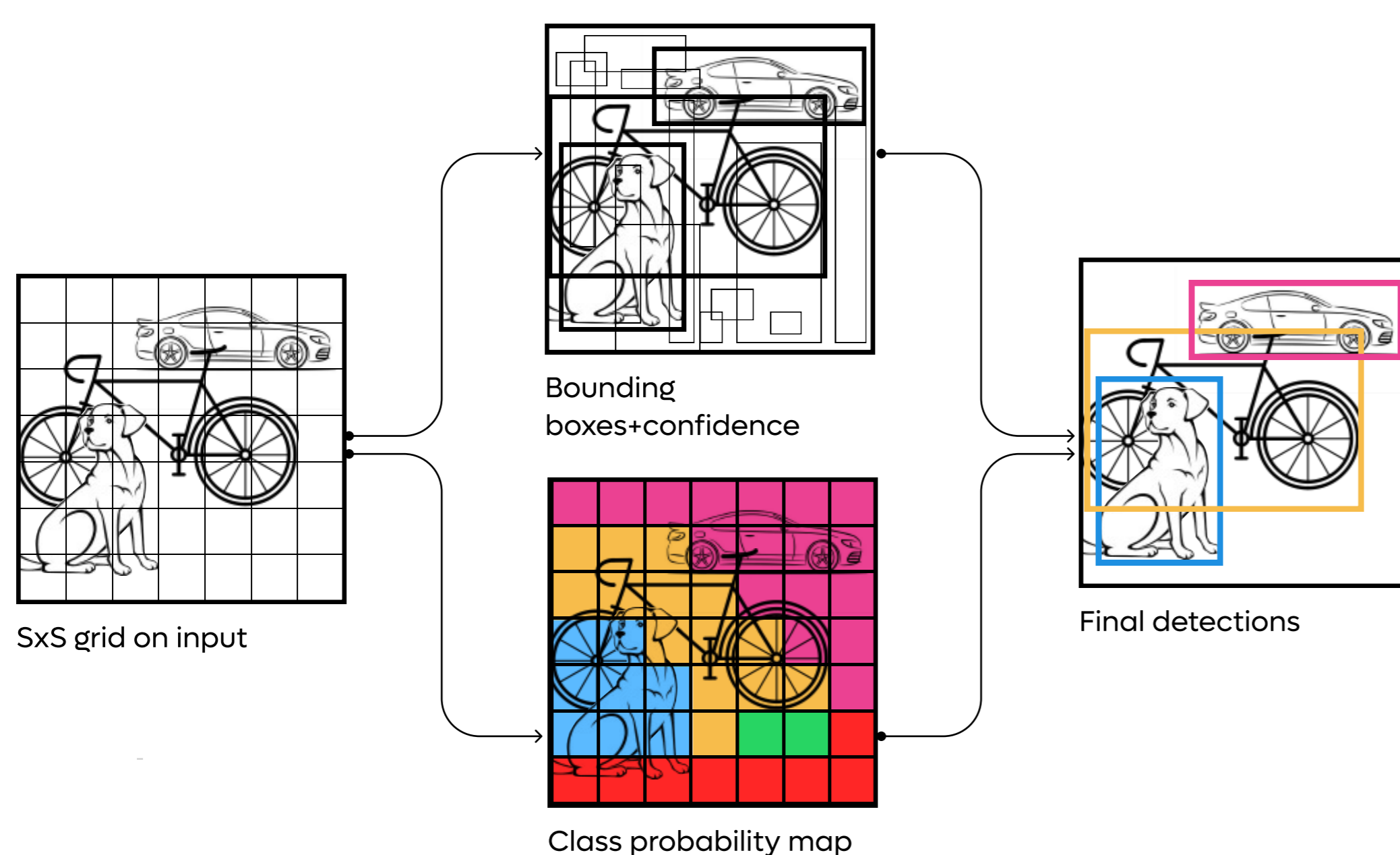
- a photo of a **building**
- a photo of a **carriage**
- a photo of a **statue**
- a photo of a **bag**
- a photo of a **mug**

CLIP-based model  
Media analyse



**Belize** (22,5%) Ranked 5 out of 211 labels

- a photo i took in **French Guiana**
- a photo i took in **Gabon**
- a photo i took in **Cambogia**
- a photo i took in **Guyana**
- a photo i took in **Belize**



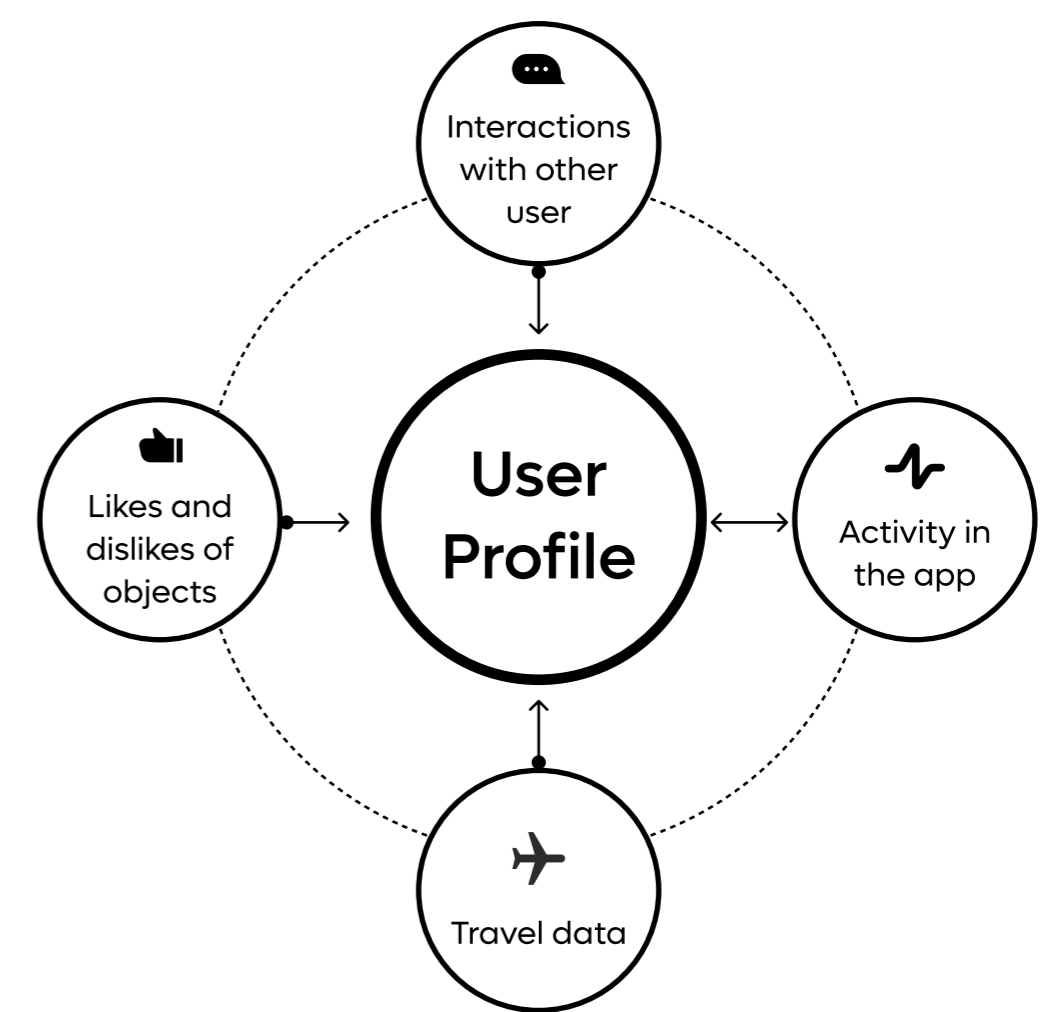
YOLO-World

[More details](#)

## 2. Raily App Data Integration

Incorporates additional data from the Raily app, like interactions with other users and specified likes and dislikes on objects, further enriching the user's profile with in-app behaviour.

Enhances the preference-based matching system with real-time user interactions and travel data, contributing to a more dynamic and accurate matching process.

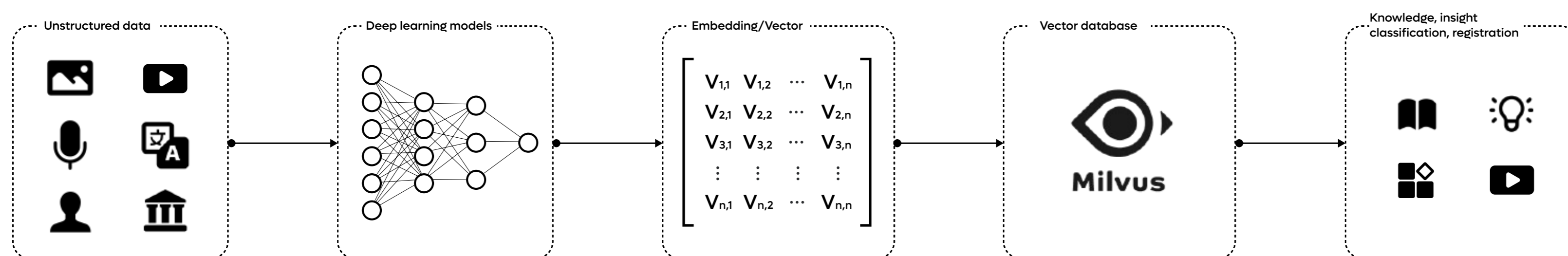


## 3. Data Vectorization & Anonymization

Collects and anonymizes vectorized data from the social and visual analysis and the Raily app interactions into a Vector Database (Milvus), forming comprehensive user profiles based on their interests and activities.

The anonymization process upholds user privacy while allowing the system to make effective preference-based connections using sophisticated vector similarity techniques.

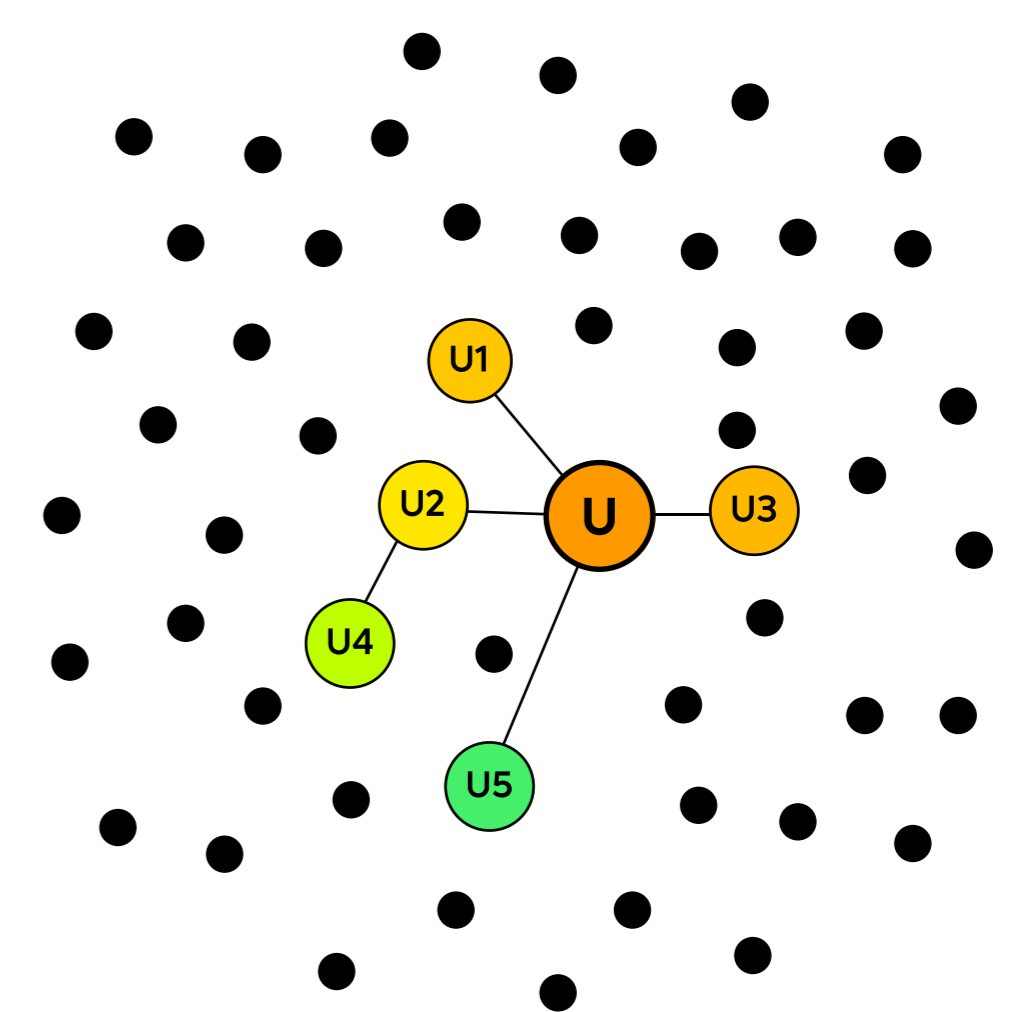
### How We Perform A Vector Search



## 4. Similarity Search for Top Matches

Employs advanced similarity search algorithms to find the best matches for users within the vector database, using high-dimensional vector data to ensure compatibility.

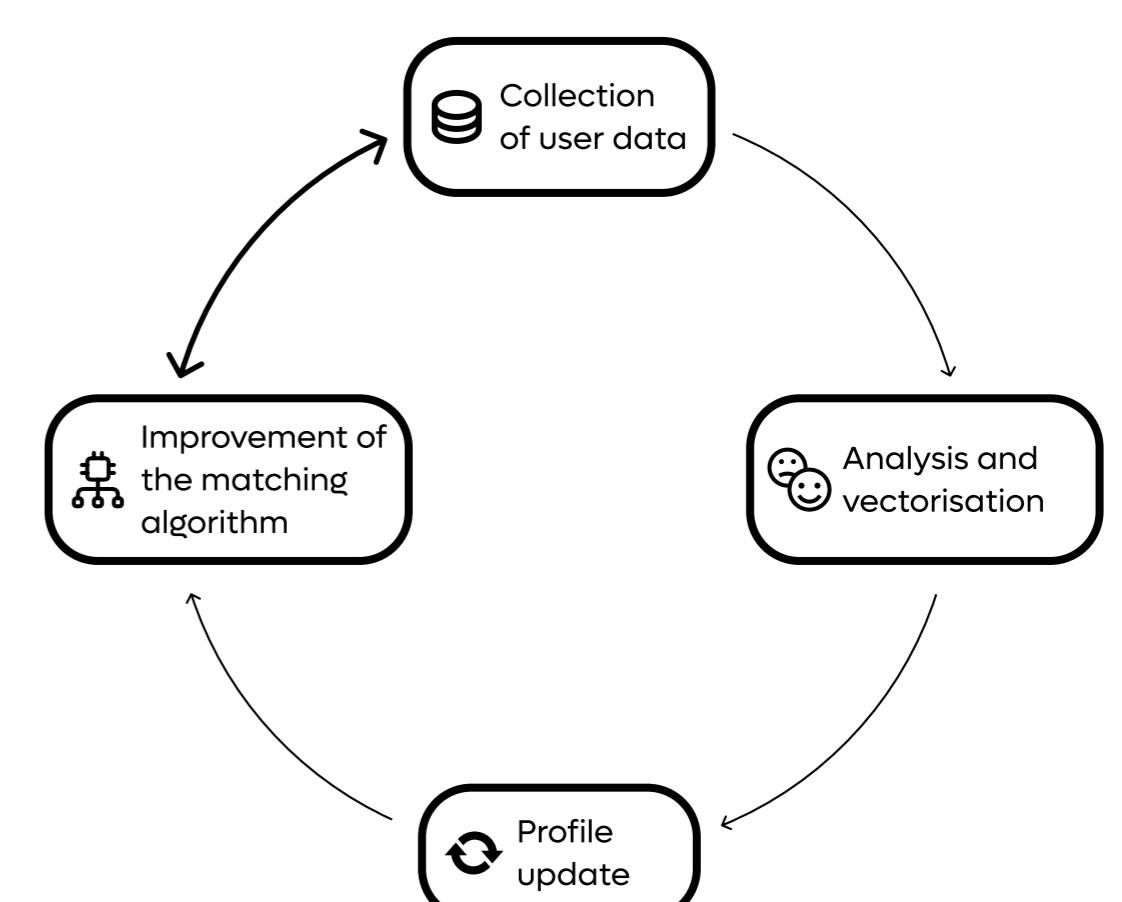
At the core of preference-based matching, this step leverages both social media and travel context data to identify users with aligned interests and preferences for potential travel companionship.



## 5. Profile Enrichment and Matching System Update

Institutes a feedback loop that continuously enriches and updates user profiles and the matching system, adapting to new data and user feedback to refine and improve match accuracy.

The feedback loop is instrumental in refining the preference-based matching algorithms, ensuring that user connections remain relevant and aligned with evolving interests and travel behaviours.



[More details](#)