



TourWithMe

Recommending peers to visit
attractions together

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I S I S T A N



Tourists

Tourism > Visiting a New City





Tourists

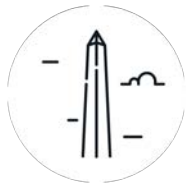
Tourism > Visiting a New City > Planification





Tourists

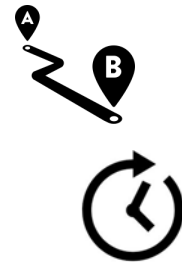
Tourism > Visiting a New City > POI RecSys





Tourists

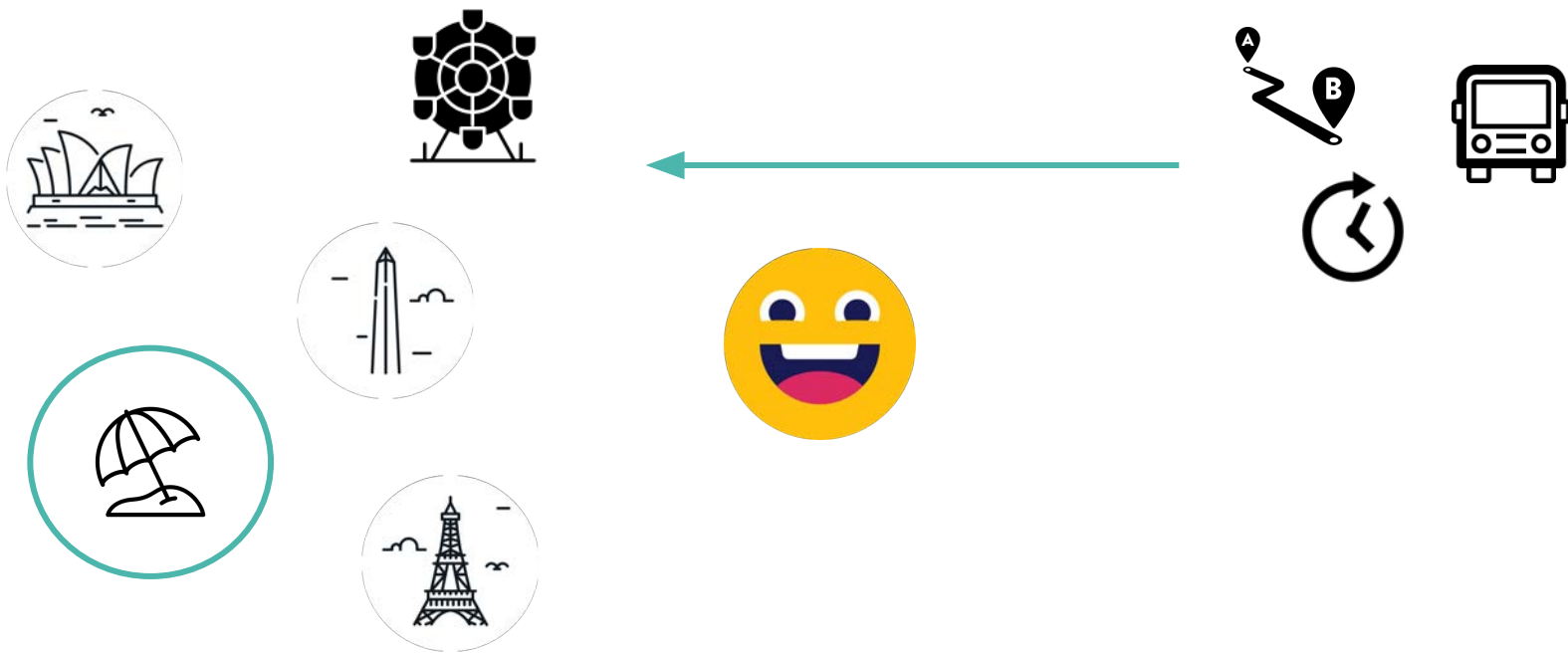
Tourism > Visiting a New City > POI RecSys





Tourists

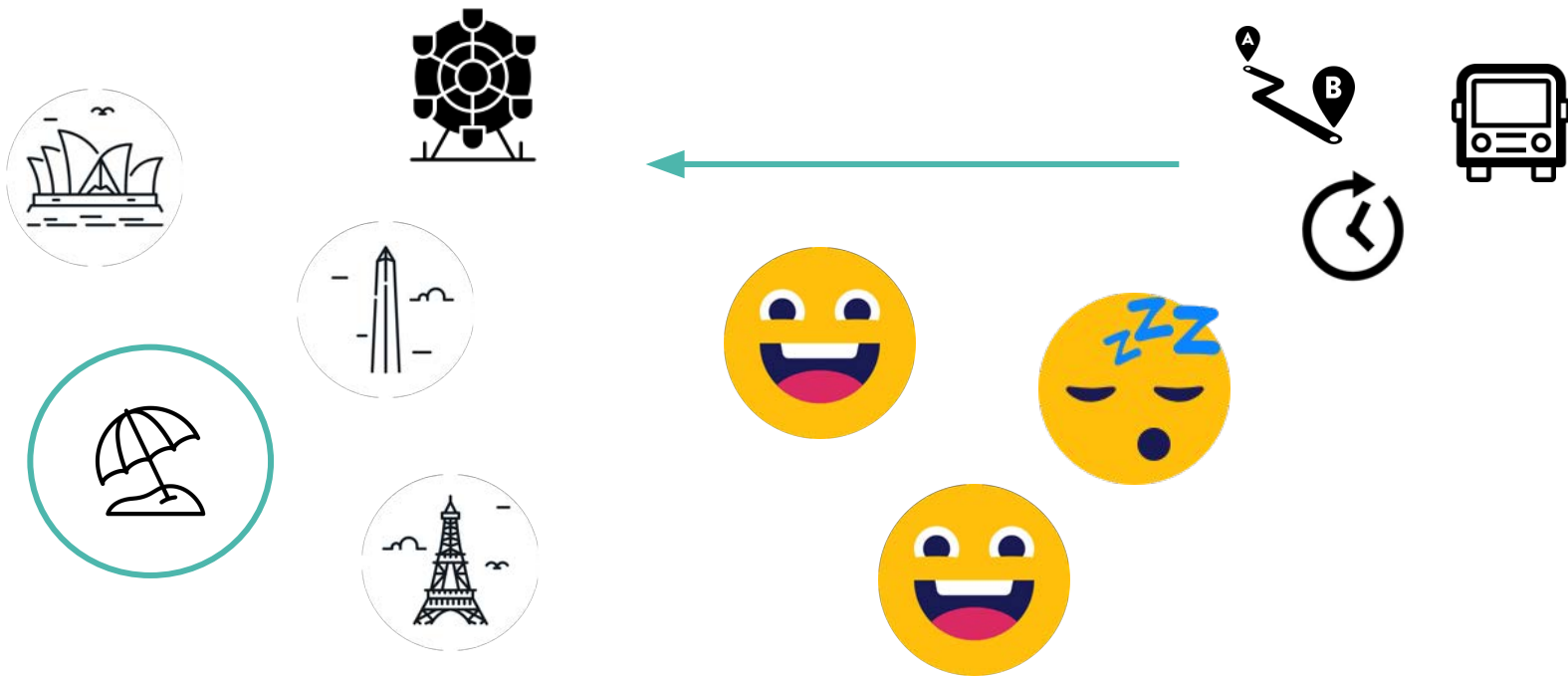
Tourism > Visiting a New City > POI RecSys





Tourists

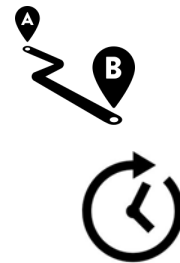
Tourism > Visiting a New City > Group RecSys





Tourists

Tourism > Visiting a New City > Group RecSys





Open Issues

Tourism > Open Issues

Inferring user interests

- Manually provided by the user.
- Inferred from check-ins or geotagged content.

Tourists travelling alone must manually look for companions

- Facebook groups.
- Specialized websites.

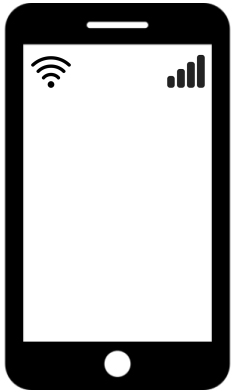


1. Inferring user interests from data collected by mobile phone.
2. Recommending groups for tourism according to user interests.
3. Recommending a POI to the generated group of users.



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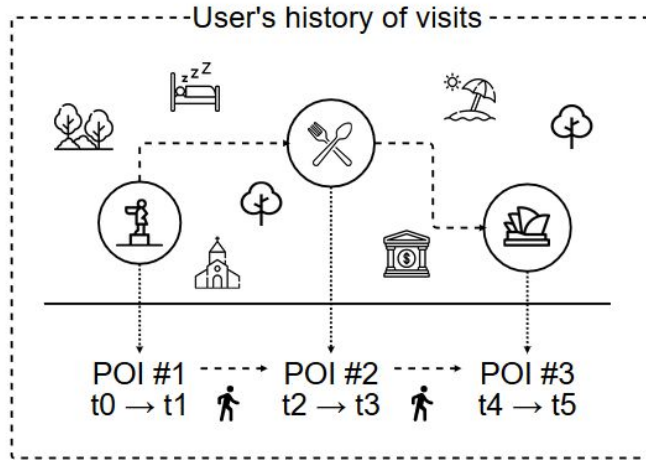
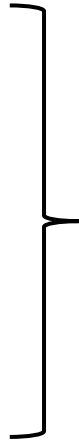
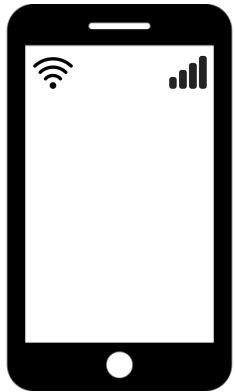
Tourism > Proposed Approach > Inferring User Interests





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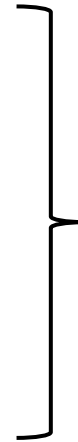
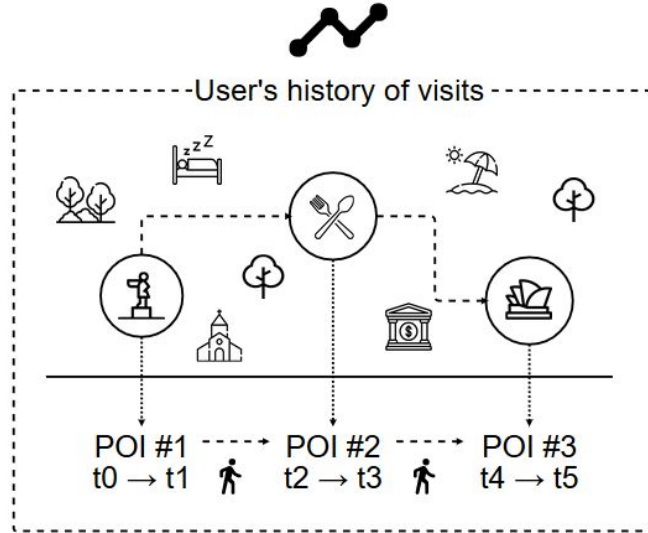
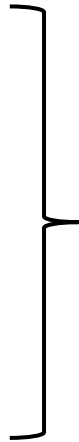
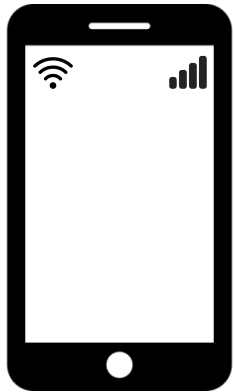
Tourism > Proposed Approach > Inferring User Interests





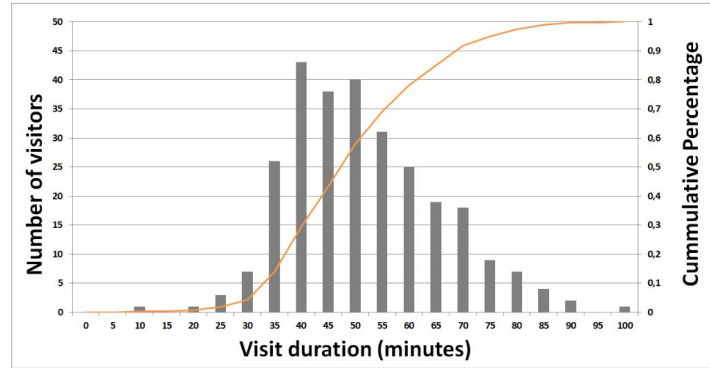
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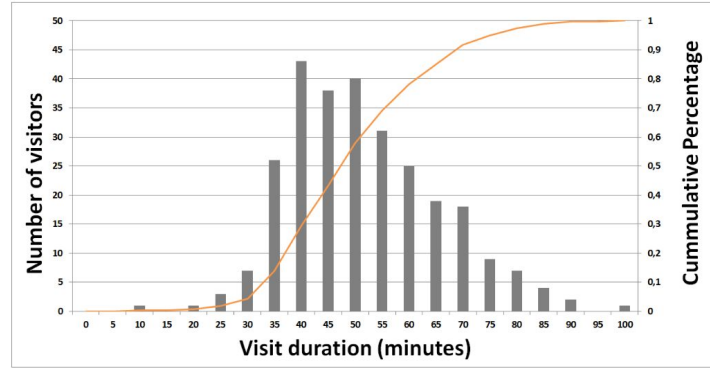
Tourism > Proposed Approach > Inferring User Interests



Inferring interests

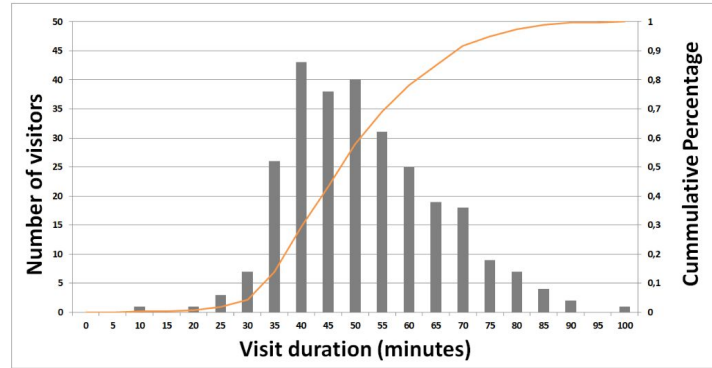






$$\text{Interest}_{\text{travel-time}} = \frac{\text{Travel Time}}{\text{Travel Time} + \text{Visit Duration}}$$

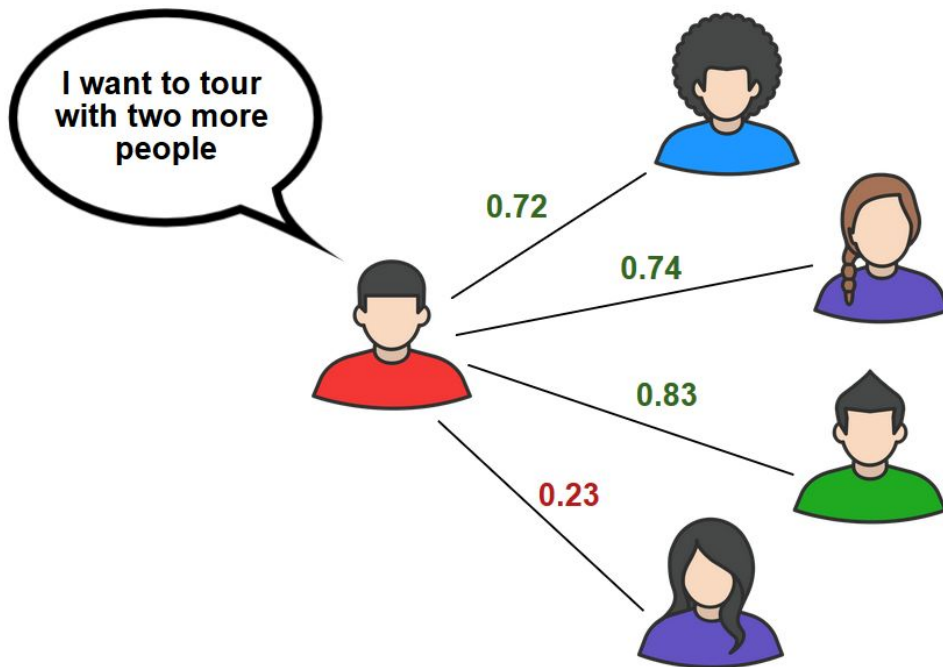




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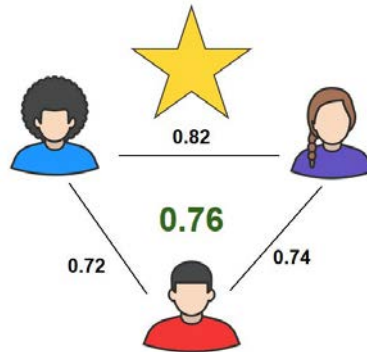
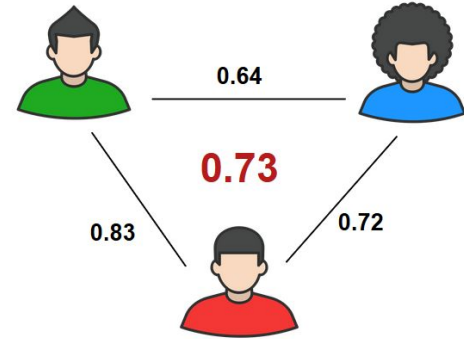
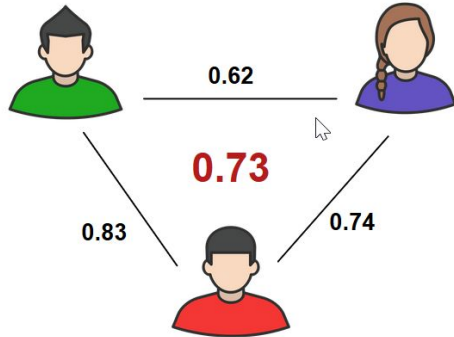
$$int_{inferred}(U, C) = \frac{\sum_{p \in C} interest(U, p)}{|C|}$$





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Tourism > Proposed Approach > Recommending Groups





Tourism > Proposed Approach > Recommending POI

Categories






	C1	C2	C3
	0.81	0.83	0.65
	0.55	-	0.66
	0.65	0.91	0.64
	0.67	0.87	0.65

Average Aggregation



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Tourism > Proposed Approach > Recommending POI







	#1	#2	#3	#4
				
	0.78	0.73	0.62	0.58

$$int(g, p) = \frac{\sum_{c \in C_p} int(g, c)}{|C_p|}$$



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	#1	#2	#3	#4
				
	0.78	0.73	0.62	0.58
	4hs	2hs	2hs	30min

$$int(g, p) = \frac{\sum_{c \in C_p} int(g, c)}{|C_p|}$$

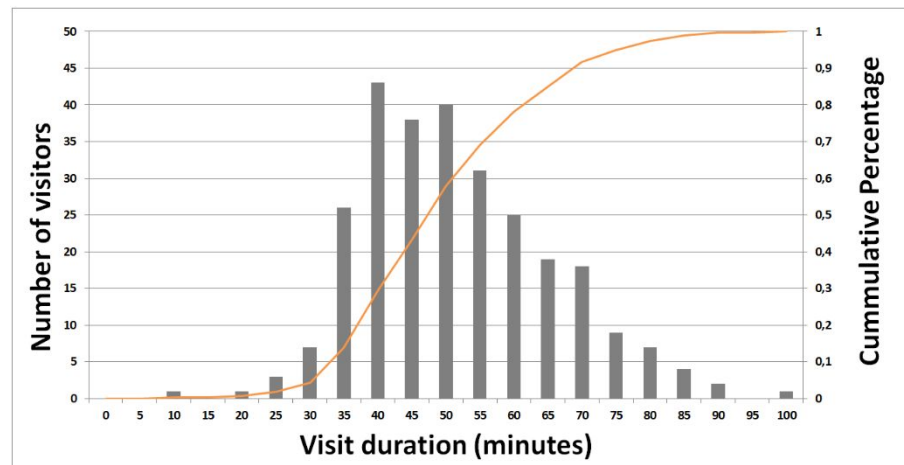


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Tourism > Proposed Approach > Recommending POI

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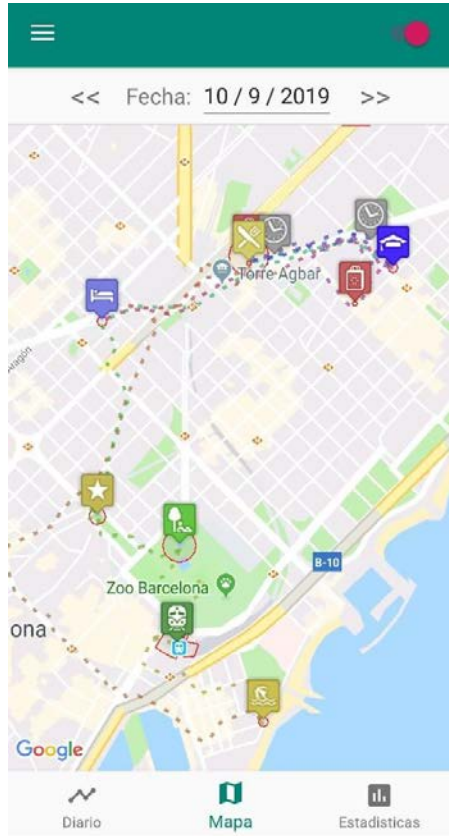
$$int(g, p) = \frac{\sum_{c \in C_p} int(g, c)}{|C_p|}$$





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Tourism > Current State and Future Directions



1. Finish development
2. Evaluate the approach
3. Adjust parameters

