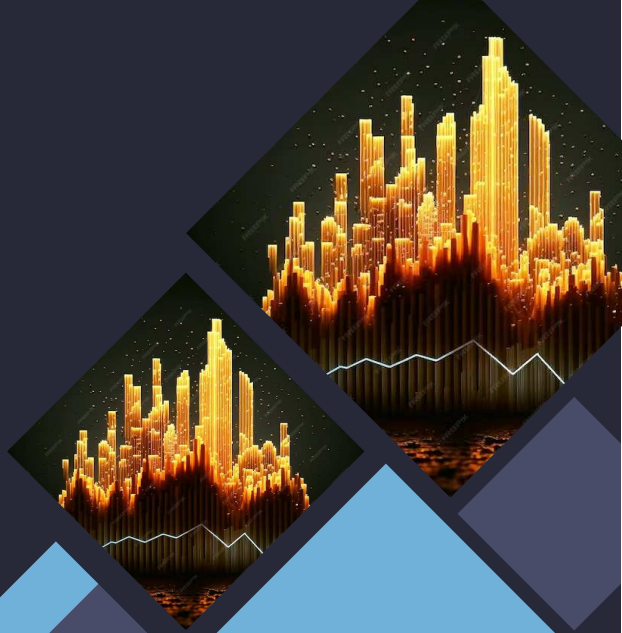
Revolutionizing Real Estate: **Habitat-Hunt**



Introduction

Discover the *ultimate* real estate search system !
By using concepts of simple fuzzy-logic and linear algebra this search sytem provides the best result out of the available choices .

Enhanced User Experience

You just have to type your query in english language but our system requires that you use relevant words like close to schools, pet friendly , affordable, crime free etc.

Use the keyword "very" if you want to prioritise the feature. Our sysytem then produces a query vector and matches it with the database and fetch the result according to relevancy.

Fuzzy Logic behind the query

Example: very close to school, swimming pool, very pet-friendly, very affordable, crime free, (no preferance for cleanliness) .

In Fuzzy Logic : 1 means absolute and 0 means none. The values between 0 and 1 represents the degree of membership of an element in a set (here our set is query vector)

I choose
1: for very
0.50: without priority
0: if no preferance is assigned
Corresponding Vector: <1, 0.50, 1, 1, 0.5, 0>

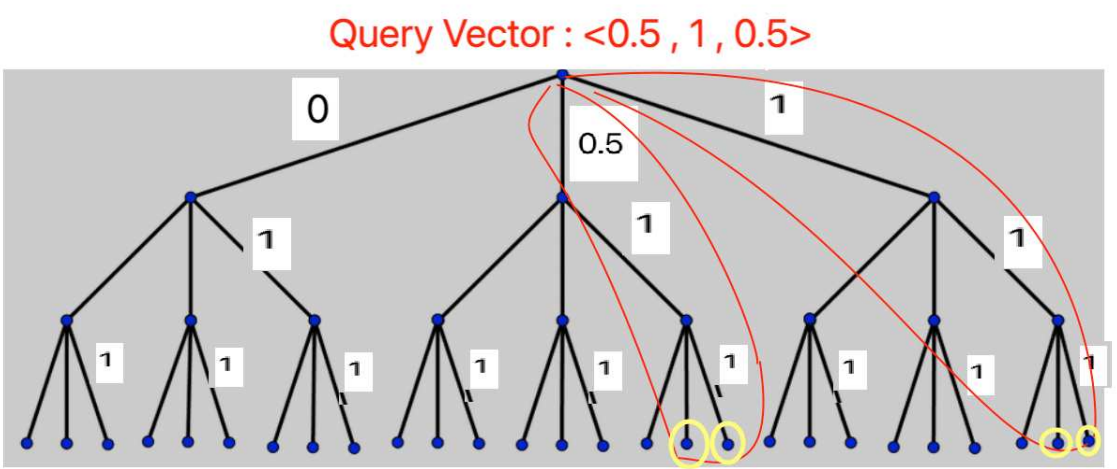
Query Matching

A Naive way is to match our query with all the possible data but in that case time complexity would be O (N (q + logN)) in all cases .

But our Habitat-Hunt algorithm can do it in O (log N) average time by iteratating through a tree which stores property as its node and preferance value like 1.0 , 0.50 etc. as weights.

N: Number of data available
Q: Number of features

Algorithm in Action



Further Scope of Innovation

- Use of NLP (Natural Language Processing) in search box in order to make the process more automated and user-friendly.
- Make the query matching algorithm even more faster over large databases where number of query types can be much large like in Google, Yahoo search engine where user can literally enter anything.
- More suggestions can be given using advanced data structures like DSU (Disjoint-set Union) .

Conclusion

The future of real estate search is here. Embrace the power of innovation and technology to elevate the real estate experience. Join the revolution today !

At the end I would like to thank our
Course Instructor: Dr. Gaurav Trivedi and Dr. Arghyadip Roy
Teaching Assistant: Mr. Anupam Kumar and Mr. Pallapu Mohan Krishna

for their endless support during our lab sessions and this course-project.

Thanks!

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