

libgeohash

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Abstract

A static library used for encoding/decoding geohashes.

1 Description

2 Usage

To use *libgeohash* just run `make`. Link `libgeohash.a` and include `geohash.h` into your project.

2.1 Encode

```
char* geohash_encode(double lat, double lng, int precision);
```

Takes in latitude and longitude with a desired precision and returns the correct hash value. If *precision* < 0 or *precision* > 20, a default value of 12 will be used.

2.2 Decode

```
GeoCoord geohash_decode(char* hash);
```

Produces an allocated `GeoCoord` structure which contains the `latitude` and `longitude` that was decoded from the geohash. A `GeoCoord` also provides the bounding box for the geohash (`north`, `east`, `south`, `west`).

2.3 Neighbors

```
char** geohash_neighbors(char* hash);
```

Uses the bounding box declared at `hash` and calculates the 8 neighboring boxes. An example is show below.

ezefx	ezs48	ezs49
ezefr	ezs42	ezs43
ezefp	ezs40	ezs41

The value returned is an array of `char*` with length of 8. The neighboring positions of values are shown below with each box representing the index of the array.

7	0	1
6		2
5	4	3

3 Contact Information

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