

Research Programme

Computer Science

Geospatial Science

Cognitive Science

Linguistics

Automatically Extracting Geographical Knowledge from Human Language

Computerised



Knowledge about geographic features:

- location:
 - absolute (e.g. coords)
 - relative (e.g. spatial relations) ♦ ♦ ♦
- characteristics (non-spatial) ♦
- time span/history
- extents/size/shape ♦
- opinions, values etc.
- place names ♦

Knowledge about paths/routes

- location
- navigation information

Knowledge about complex geosocial concepts

Multilingual ♦ ♦

Context Sensitive ♦

Written:

- misc web documents ♦ ♦ ♦
- newspaper articles
- scientific reports
- blogs
- social networking ♦
- user interaction ♦

Verbal

Non-verbal

- gestures

Projects

NaturalGeo (OS) ♦

EuroGEOSS (EU) ♦

University of Genoa/CIMA
collaboration(CIMA) ♦

Horizon PLP 2011 (RCUK) ♦

Nottingham Corpus of Geospatial Language(EU) →

Line	Text	File	Line	Date
1118	...a high-level railway bridge, the church will stand beside the stream, for the new bridge has destroyed them in	1-42356	30-04-12	1118
1120	A similar pillar was erected beside the Nottingham and Leicester road, west of Barker Wood	1-30981	30-04-12	1120
1121	Personal Data has photo album, where water cascades 300 feet beside the bridge	1-78743	30-04-12	1121
4162	From the Lake View Hotel Club House the path beside Lake View is the 'Tobacco Road' where a parcel	1-78604	30-04-12	4162
4830	There is an interpretation board at the pond beside the Great Ouse bridge, extending the history of the transport	1-34091	30-04-12	4830
4832	Through a gate into the Old Mill Park river and below beside the ground in the depression, lined with trees on the left side,	1-88283	30-04-12	4832
4833	and in the center, there was a blacksmith shop beside the house, where the road was the widest with many	1-44277	30-04-12	4833
4834	transported path opens in the heart of the city, located right beside the Financial District	1-72140	30-04-12	4834
4835	between the beautiful stretch of beach and houses and down beside the East China Sea.	1-85031	30-04-12	4835
5075	with the clear landscape of 'All alone' from 1935, beside a 'Shore' a high-speed stream covered straight rising from 1947.	2-14841	30-04-12	5075
5076	The water, though, was beside the Herringston coal mine, set the Dams or Slapton copper	1-82283	30-04-12	5076
1149	Wonderful coast line and good views beside the coast and the Dams or Slapton copper	1-15724	12-05-12	1149
1150	This fine view shows the landscape is right beside the railway track.	4-2802	18-06-12	1150
1151	Wonderful coast line and good views beside the coast and the Dams or Slapton copper	1-84404	18-06-12	1151
1152	gates, a more covered park, beside houses and fields, next to the	1-34748	18-06-12	1152
1153	This shows a 18-year-old girl was attacked in parkland beside Black Creek, near the Riverside Shire's Rugby League Club.	1-84713	30-07-12	1153
1154	Edinburgh and Glasgow, often high above the town, sometimes walking beside it, via houses and open fields and green fields	1-84811	30-07-12	1154
1155	Says all beside the river, across the Old cathedral and the bonded government building	3-20877	25-07-12	1155
1156	see circular walks everywhere - short, left, coastal, bridges, walls beside the river, across the Old cathedral and the bonded government building	1-47382	25-07-12	1156
1157	Location of walk: From Ransgate to Ransgate Market Place, then beside the river, across the Old cathedral and the bonded government building	1-89481	25-07-12	1157
1158	The path leads you beside the canal and you come to a little bridge, the	2-24982	25-07-12	1158
1159	Says all beside the river, across the Old cathedral and the bonded government building	3-20877	25-07-12	1159
1160	sees all the beautiful landscape from the water beside the bridge.	1-77373	25-07-12	1160

Applications

Natural Language Querying ♦

Geospatial Language Harvesting ♦

Mapping from Language to Coordinates ♦

Mapping from Language to What,Where,When ♦

Domains

Topography ♦ ♦

Forestry ♦

Drought ♦

Biodiversity ♦

Disaster Management ♦

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