

Idea elaboration: ESP-Equivalent

Abstract

The idea of The GeoTagger ESP-Equivalent Game is partnering two people to identify geographical locations where certain news articles took place.

Since the only two things the partners have in common are that they both read the same article and see the same map, they must decide what location on the map this article could be relevant to.

After they decide, another round is started and so on. During the game, information about news items is collected and verified.

Motivation

The idea behind the game is to use the computational power of human to perform a task the computers cannot yet do (identify geographical locations for news articles), by packaging the task as game.

Natural language processing algorithms can analyze the text (articles) and provide us with tags (geographical entities, keywords), then depending on this tags, we can use human power to identify the location of this article. So they can provide valuable data while playing and being entertained.

Introducing the GeoTagger ESP-Equivalent Game

Once the game starts, a user automatically matched with a random partner in the close by area (according to IP address). The partners do not know each other's identity and they cannot communicate.

Once matched, timer is on (10 minutes for example), they will both be shown the same news item with the most important keywords along with the same map.

Their task is to agree on the location of this article by clicking on the map, Only if both players have submitted their selection, feedback is provided. If both players agree, the players receive points, and then another article-keywords-map shown up for next question, and so on, the players have an option to chose pass on some questions.

Beside clicking on a point on the map, Players can select an options to draw shapes on area (circle, rectangle or polygon..).

The more the shape input of the players overlap, the more points they get. Once the players disagree on a location, negative feedback is provided and another news item is presented.

After the time is up, a point summary is given and each player is assigned the sum to his overall score. So we can provide some statistic for each player, best scores and so on.

Data Retrieval, Collection and Verification

Our database gets data by crawling the web, the news items get processed, and the tag-cloud extracted. Verification takes place through iteratively feeding the same articles to different players.

Each time the game is played, a set of articles is being processed. After some time we will have a pretty good guess from the user input where this article is situated.

Implementation

The game should run on any web browser, retrieving data from the web server, We could use of course HTML5, CSS, yahoo maps API, YUI 3, Flash and node JS for server side.

Conclusion

This game provides very useful information about the location of the article in fun way.

Also, each game session can be recorded, so that a single player could potentially play against a previously recorded session thereby providing more data for the news item collection.