A Scalable Technique For Interactive Visualization Of Large Node-Link Graphic In A Web Browser

Tech ID: 19861 / UC Case 2009-702-0

BRIEF DESCRIPTION

A new tool capable of interactively visualizing millions of connected entities, natively in a web browser, without any plugins

BACKGROUND

Recently, there has been an increase in activity on social web sites and many other online communities. Such sites produce rich network data, which can be very large scale and difficult to analyze. Most searches on the web are conducted using text, which has several limitations. The best tools available at the moment can only visualize hundreds (in some case thousands) of nodes before they slow to unusable states.

DESCRIPTION

Researchers at the University of California, Santa Barbara have developed a new tool capable of interactively visualizing millions of connected entities, natively in a web browser, without any plugins. For the end user, the experience is similar to a Java Applet or other dynamic web technology, but without the inherent scalability limitations of client-side processing. The novel approach results in a smooth, interactive, real-time animation based on mouse movements in the browser.

ADVANTAGES

- Scalable graph visualizations
- Native in all web-browsers
- No client-based graph processing required
- Highly interactive, even for graphs of hundreds of thousands of nodes
- Embeddable in any web page
- Capable of visualization of RDF/XML and other semantic web content

APPLICATIONS

- Social Web Analytics
- Large Graph Analysis
- Embedded Visualization of any Graph Data (natively in any browser)

This technology is available for licensing.

CONTACT

University of California, Santa Barbara Office of Technology & Industry Alliances
padilla@tia.ucsb.edu
tel: 805-893-2073.

INVENTORS

- Bostandjiev, Svetlin
- Gretarsson, Brynjar
- Hollerer, Tobias H.
- O'Donovan, John

OTHER INFORMATION

KEYWORDS

Interactive Visualization, Large Node-Link

CATEGORIZED AS

- **Computer**
  - Software

RELATED CASES

2009-702-0, 2009-703-1

PATENT STATUS

Patent Pending

ADDITIONAL TECHNOLOGIES BY THESE INVENTORS

- Envisor - Automatic Augmented Reality

University of California, Santa Barbara
Office of Technology & Industry Alliances
342 Lagoon Road, ,Santa Barbara,CA 93106-2055 |
www.tia.ucsb.edu
Tel: 805-893-2073 | Fax: 805.893.5236 | padilla@tia.ucsb.edu