BOTTARI: Reality Mining on Micropost Streams about Insadong’s Restaurants

Last Updated Sunday, 10 March 2013

BOTTARI [1] is an augmented reality application that permits the personalized and localized recommendation of points of interest (POIs) based on the temporally-weighted opinions of the community. The technological basis of BOTTARI is the highly scalable LarKC platform [2] for the rapid prototyping and development of Semantic Web applications. In particular, BOTTARI exploits LarKC’s deductive and inductive stream reasoning [3]. BOTTARI was evaluated on a three year collection of tweets about 319 restaurants located in the 2 km2 district of Insadong, a popular tourist area of the South Korean city of Seoul.

Figure above illustrates four screenshots of the BOTTARI Android application: the AR interface with the four types of recommendations and the possibility to filter by distance is shown in (a); further details about a selected POI are shown in (b) and (c) where the similar restaurants and the map with the POI description are visualized, respectively; finally, the trend over time of user opinions about the POI are graphically drawn in (d).

BOTTARI is the winner of the 9th edition of the Semantic Web Challenge, co-located with the 2011 International Semantic Web Conference. BOTTARI is currently field tested in Korea by Saltlux.

For more information:
- watch the videos of the frontend on youtube:

- http://youtu.be/XGOKe_lhSks
- http://youtu.be/c1FmZUz5BOo
-

watch the live demo of the backendReferences

[1] Marco Balduini, Irene Celino, Daniele Dell’Aglio, Emanuele Della Valle, Yi Huang, Tony Kyung-il Lee, Seon-Ho Kim, Volker Tresp: BOTTARI: An augmented reality mobile application to deliver personalized and location-based recommendations by continuous analysis of social media streams. J. Web Sem. 16: 33-41 (2012). http://dx.doi.org/10.1016/j.websem.2012.06.004 [2] Dieter Fensel, Frank van Harmelen, Bo Andersson, Paul Brennan, Hamish Cunningham, Emanuele Della Valle, Florian Fischer, Zhisheng Huang, Atanas Kiryakov, Tony Kyung-il Lee, Lael Schooler, Volker Tresp, Stefan Wesner, Michael Witbrock, Ning Zhong: Towards LarKC: A Platform for Web-Scale Reasoning. ICSC 2008: 524-529. http://doi.ieeecomputersociety.org/10.1109/ICSC.2008.41

[3] Davide Francesco Barbieri, Daniele Braga, Stefano Ceri, Emanuele Della Valle, Yi Huang, Volker Tresp, Achim Rettinger, Hendrik Wermser: Deductive and Inductive Stream Reasoning for Semantic Social Media Analytics. IEEE Intelligent Systems 25(6): 32-41 (2010). http://doi.ieeecomputersociety.org/10.1109/MIS.2010.142