

Web-based Visual Analytics for Social Media Data

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Social media data provides valuable information about different events, trends and happenings around the world. Visual data analysis tasks for social media data have large computational and storage space requirements. Due to these restrictions, subdivision of data analysis tools into several layers such as Data, Business Logic or Algorithms, and Presentation Layer is often necessary to make them accessible for variety of clients. On server side, social media data analysis algorithms can be implemented and published in the form of web services. Visual Interface can then be implemented in the form of thin clients that call these web services for data querying, exploration, and analysis tasks. In our work, we have implemented a web-based visual analytics tool for social media data analysis. Initially, we extended our existing desktop-based Twitter data analysis application named "ScatterBlog" to create web services based API that provides access to all the data analysis algorithms. In the second phase, we are creating web based visual interface consuming these web services. Some major components of the visual interface include map view, content lens view, abnormal event detection view, Tweets summary view and filtering / visual query module. The tool can then be used by parties from various fields of interest, requiring only a browser to perform social media data analysis tasks.