

Chapter 1 : dblp: Computing with Social Trust

This chapter examines the diversity of sources from which trust information can be harnessed within Social Web applications and discusses a high level classification of those sources. Three different techniques for harnessing and using trust from a range of sources are presented.

According to an embodiment the aggregated weighted score is calculated for each of the plurality of the information of the user as described by the exemplary embodiment. According to an embodiment of the invention responsiveness of users toward the activities on web based platform is aggregated. Further aggregated weighted responsiveness score is computed, step According to an embodiment responsiveness is a factor of response time and accuracy or likings of the provided response. Responsiveness is calculated for each of the pluralities of quantifiable activity. Further weights are assigned for each of plurality of the responses. Aggregated weighted responsiveness score is calculated based up the weights assigned to each of the pluralities of the responses. The assignments of weights vary for each of the plurality of responses based upon the theme. Accordingly more sensitive themes are weighted more than a general topic. For example an accurate response to health question is weighted more than a response to a movie topic. Furthermore the responses and assignment of weights to each of the plurality of the responses will be dynamically expanded based on change in social media landscape and its activities on web based platform. Further prompt and accurate responsiveness is a critical factor in trust. According to an embodiment of the invention aggregated weighted post rating score of the users is computed, step Each of the plurality of ratings on posts by the user is aggregated and weighted average is calculated for the post ratings. Post comprises the contents at least posted, referred, liked, shared or reviewed by the user. Weight is assigned to each of the plurality of post ratings. The overall weighted score for plurality of post ratings is calculated. Further assignment of weights to each of the post ratings can vary based upon theme of the post and the ratings received by the post. According to an embodiment aggregated weighted attitude score of the user is computed, step Text based attitude analysis is done by text analyzer of trust ranking engine. Trust ranking engine compiles list of pluralities of contents and postings by the user on web based platforms. Text analyzer comprises of sentiment analyzer components and positivity analyzer component According to an embodiment sentiment analyzer component uses text analytics and natural language processing techniques to identify attributes of the user comprising of sentiments, emotions, polarity, objectivity, subjectivity and mood present in the text. A Weight to each of the attribute is assigned. Further the weight is assigned based on the positivity or negativity of the sentiments. Further the sentiment analyzer computes the sentiment score for the users based upon the attributes analyzed. According to an embodiment the positivity analyzer component uses word based text analytics technique to identify attributes including but not limiting to positive or negative expressions, feelings and moods in the content posted or reviewed by the user. Further weight is assigned to each of the attributes. Furthermore positive expressions may be weighted more than the negative expressions. According to an embodiment trust ranking algorithm calculates overall attitude score based on sentiment score and positivity score. All the indicators are factored-in to arrive at the overall attitude score. According to an embodiment of the invention overall trust score for the user is calculated, step Trust ranking algorithm calculates overall trust score for the user by computing weighted average of the weighted activity score, weighted responsiveness score, weighted ratings score and weighted attitude score. According to an embodiment the trust score is used to rank the users on basis of scores, step Further a trust rank or level is assigned to each of the friends of the user based upon the trust score. Further the method enables a user to create a web of friends based upon the trust score obtained by each of the friends. According to an embodiment of the invention, the system has access to all social sites to which the user is operatively associated with through its component social connector The system comprises of activity aggregator , post ratings aggregator , responsiveness calculator , text analyzer , expertise analyzer and social connector Text analyzer comprises of positivity analyzer and sentiment analyzer The activity

aggregator aggregates all the quantifiable activities of a user from the social sites to which the user is registered and is operatively associated with. The aggregated quantifiable activities are factored to arrive at a cumulated activity score of the user. Responsiveness calculator measures the responsiveness of the user in the entire web based platform to which user is operatively associated with and calculates the cumulated responsiveness score. Text analyzer analyses the content of the user in entire web based platform user is operatively associated with. Further text analyzer comprises of sentiment analyzer and positivity analyzer. Sentiment analyzer extract pluralities of attitudinal information comprising sentiment, opinion, mood and emotion from the contents posted, reviewed or referred by the user and positivity analyzer use text analyzing techniques to identify the positive attitude in the comments posted and reviewed by the user in the entire web based platform the user is associated with. Text analyzer, sentiment analyzer and positivity analyzer calculate the aggregate attitude score of the user. Expertise analyzer analyzes topics of interest for the user and the accuracy of answers posted by the user in that particular topic. Expertise analyzer analyze and aggregate the list of expertise of the user in various topics. Expertise analyzer enables the network of users to select social connects or friends based on expertise of topic. Expertise analyzer further suggest the network of users an expert user in related topic when at least a user addresses a query in the topic. The social connector provide connection to social networking sites member or subscribed social sites and aggregate content or data or activities required by the engine for its calculation. According to an embodiment of the invention server computer hosts the trust ranking engine or trust ranking software. The main server computer operates in networked environment which is connected to network via network interface. Further database server provides all the persistence storage requirements of the trust ranking software including but not limiting to storing training model data, application data. LDAP server acts as a user registry which stores the entire user account details. Trust ranking software or trust ranking engine extensively uses LDAP server as user registry. According to an exemplary embodiment the deployment model comprises of HTTP server, load balancer, firewall, application server cluster, database server and LDAP server. According to an embodiment of the invention user can connect to trust ranking platform via each of plurality of client devices. Client devices includes but is not limited to desktop, laptops, handheld devices, smartphones, kiosks, tablets, PDA Personal Digital Assistant. According to an embodiment of the invention trust ranking supports multiple deployments including but not limiting to In-house deployment and Cloud deployment. Further the platform also exposes the services for third party consumption. According to an embodiment of the invention for In-house deployment of Trust Ranking engine user initiates the request for trust ranking platform via one of the client devices. Further there is firewall interception wherein the request is intercepted by corporate firewall which ensures that the request is done on allowed ports and provides other security features including but is not limited to tunneling, IP checks, protocol enablement, caching, request routing and spam filtering. Further in step of load balancing, hardware load balancer routes the request to the corporate web server based on current load so as to provide optimum response time and optimum load handling. The request proceeds to the step of web server handling. The request is handled by corporate web servers. Furthermore provide additional features like caching. Further it has plugins to route the request to the corresponding application servers. The request is further routed for application server handling. According to an exemplary embodiment exist in pluralities which are horizontally and vertically clustered to handle the peak load with acceptable Service Level Agreements SLAs. Trust Ranking software running on these servers process the request. The request is further processed to LDAP server handling. A dedicated LDAP server stores users credentials and other user profile related information. During request processing cycle, the data which needs to be persisted by software persists in database software running on database server and request is processed for database server handling. Pluralities of database servers are present in production environment to handle peak load and provide optimum response times. According to another embodiment of the invention the trust ranking software can be hosted in the cloud environment. For the purpose of this invention fiends here include but are not limited to the social contact to which the user is interconnected on the web based platform. According to an embodiment of the

invention the trust score is used in grouping and ranking the friends based on their trust score. The web of friends is created by the user based upon the trust scores obtained by the friends. The friends can be classified as most trusted friends the friends with maximum trust score, average trusted friends , the friends with average trust score and least trusted friends the friends with minimum trust score. The web of friends enable a user to share data and information with friends based upon the level of trust they share with the user. It enables a user to filter friends to share sensitive information with. It also helps to decide level of interaction with a friend. Further it enables the user for privacy setting of profile based upon the trust level of friends. Furthermore it enables user to allow permitted view of contents based upon the trust level. Still further it enables user to filter any profile information. In an alternative embodiment of the invention activity score computed by trust score of the trust ranking engine or trust ranking algorithm is used to identify the commonality of interests or activities between the user and its social contacts or friends. Further the user can be alerted by red flags raised by the Trust Ranking Engine to get know at least a potentially serious trends of its social contact. Further the social contact includes but is not limited to online companion and chat buddies. One or more of the above-described techniques can be implemented in or involve one or more computer systems. The computing environment is not intended to suggest any limitation as to scope of use or functionality of described embodiments. With reference to FIG. The processing unit executes computer-executable instructions and may be a real or a virtual processor. In a multi-processing system, multiple processing units execute computer-executable instructions to increase processing power. The memory may be volatile memory e. In some embodiments, the memory stores software implementing described techniques. Further the memory across multiple servers is clustered to replicate cache data. A computing environment may have additional features. For example, the computing environment includes storage , one or more input devices , one or more output devices , and one or more communication connections

Chapter 2 : Washington State Department of Social and Health Services | Transforming Lives

The Social Web constitutes a shift in information flow from the traditional Web. Previously, content was provided by the owners of a website, for consumption by the end-user.

How are you finding the job? I think it is important to blend product and business opportunities into the technology investments we make, helping drive strategy. The FT is an organisation that understands the importance of this and people here in all areas are thinking about how technology influences what comes next and how to adapt to it. Being product and output focussed is important because technology is not just an enabler, in a digital age technology fundamentally shapes the product. This shows in the innovations made by the FT, from being the first newspaper to implement a Paywall through to using technologies like HTML5 for the FT Web app and starting to change the publishing model with services like FastFT, which is blending our traditional insight with bite size chunks delivered 24 hours a day. What are the opportunities there? There are two parts to this. One is in how we use data from our services to deliver value. This business intelligence helps us understand how people use our services, plus deliver more appropriate content and advertising to our audiences. The FT is years old and for most of that history the feedback on what our audience did with our content was practically zero. It helps inform strategic decisions from editorial choices through to how we market and position a product and where we focus our product strategy. We are making investments to support our data strategy, such as moving to Amazon Redshift to deliver maximum value from our data warehouse. SQL has been perceived as a little uncool for a while now and we considered using Hadoop, but Redshift addresses cost, performance and data size constraints well. Compared to Hadoop it is much easier for analysts to use. What may have been a Hadoop project can become just a query in Redshift. Our goal is to move away from getting reports in batches which take a long time to produce to being able to analyse data as close as possible to real time. The second part is in using Metadata better. I am a huge supporter of using linked and semantic data to build better IT systems, which can use the intelligent frameworks these technologies create to make clever service decisions. We also used this architecture extensively at the Press Association to rebuild the content management system and deliver the Olympics API, content for Locog website and services used on a range of sites from MSN to the Daily Mail. Many other companies picked up on the potential of this approach when I presented the BBC case study at the Semtech conference in When it comes to a modern content management system CMS , how have things evolved? What does the FT need in this respect? Most people hate their CMS. Some work around it. Often it gets in the way. This brings me back to the Semantic Metadata and architecture pattern mentioned above. In essence, you are trying to create a sea of content assets that can be pulled together by metadata in as flexible a way as possible to build products. Anything that gets in the way of this will make your job harder and slow down your innovation. NoSQL systems play nicely into this because they allow you to create a content store which has very few restrictions for storing your content in an efficient manner. Pair this with really good metadata and you have all you need to build products. The beauty of the pattern is not in trying to replace everything. In general, when you think about how you want to expose your content, then you start thinking about an API that should reflect how you want to represent your services, not the internal structure or limitations of your CMS. Mobile devices drive over half of all FT. The web app has seen over 4m users since launch in June This is highly desirable. We have overcome the challenges in using HTML5 and set up the Edge conference with FT Labs, which drives forward conversations on how client side services can address some of these. As you look at the number of platforms being supported and the issues in managing them, HTML5 becomes the best bet for a cross platform approach. Our editorial team are continually exploring different ways to tell a story using data , providing a richer level of analysis by proving it or disproving it with data, interactive or graphics. Community and social is of course an area we want to do more in. We encourage readers to connect with our content and our journalists to reply to readers comments. We run polls on ft. Technically we are investing in hybrid models for using cloud in a sensible and

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sustainable way. It is still an immature market. What will your talk be about? Take our content being presented through Flipboard as an example. We need to be using all the tools we have to make this type of opportunity possible and build access to our services in a way that can deliver and respect our content through any platform or medium, whether we own and control the platform or not. Tickets are available now.

Chapter 3 : Prospective Students | John Jay College of Criminal Justice

Chapter9 Capturing Trust in Social Web Applications John O'Donovan Abstract TheSocial Web constitutes a shift in informationi-,ow fromthe traditional Web. Previously, content was provided by the owners of a website, for consump-

According to an embodiment the aggregated weighted score is calculated for each of the plurality of the information of the user as described by the exemplary embodiment. According to an embodiment of the invention responsiveness of users toward the activities on web based platform is aggregated. Further aggregated weighted responsiveness score is computed, step According to an embodiment responsiveness is a factor of response time and accuracy or likings of the provided response. Responsiveness is calculated for each of the pluralities of quantifiable activity. Further weights are assigned for each of plurality of the responses. Aggregated weighted responsiveness score is calculated based up the weights assigned to each of the pluralities of the responses. The assignments of weights vary for each of the plurality of responses based upon the theme. Accordingly more sensitive themes are weighted more than a general topic. For example an accurate response to health question is weighted more than a response to a movie topic. Furthermore the responses and assignment of weights to each of the plurality of the responses will be dynamically expanded based on change in social media landscape and its activities on web based platform. Further prompt and accurate responsiveness is a critical factor in trust. According to an embodiment of the invention aggregated weighted post rating score of the users is computed, step Each of the plurality of ratings on posts by the user is aggregated and weighted average is calculated for the post ratings. Post comprises the contents at least posted, referred, liked, shared or reviewed by the user. Weight is assigned to each of the plurality of post ratings. The overall weighted score for plurality of post ratings is calculated. Further assignment of weights to each of the post ratings can vary based upon theme of the post and the ratings received by the post. According to an embodiment aggregated weighted attitude score of the user is computed, step Text based attitude analysis is done by text analyzer of trust ranking engine. Trust ranking engine compiles list of pluralities of contents and postings by the user on web based platforms. Text analyzer comprises of sentiment analyzer components and positivity analyzer component According to an embodiment sentiment analyzer component uses text analytics and natural language processing techniques to identify attributes of the user comprising of sentiments, emptions, polarity, objectivity, subjectivity and mood present in the text. A Weight to each of the attribute is assigned. Further the weight is assigned based on the positivity or negativity of the sentiments. Further the sentiment analyzer computes the sentiment score for the users based upon the attributes analyzed. According to an embodiment the positivity analyzer component uses word based text analytics technique to identify attributes including but not limiting to positive or negative expressions, feelings and moods in the content posted or reviewed by the user. Further weight is assigned to each of the attributes. Furthermore positive expressions may be weighted more than the negative expressions. According to an embodiment trust ranking algorithm calculates overall attitude score based on sentiment score and positivity score. All the indicators are factored-in to arrive at the overall attitude score. According to an embodiment of the invention overall trust score for the user is calculated, step Trust ranking algorithm calculates overall trust score for the user by computing weighted average of the weighted activity score, weighted responsiveness score, weighted ratings score and weighted attitude score. According to an embodiment the trust score is used to rank the users on basis of scores, step Further a trust rank or level is assigned to each of the friends of the user based upon the trust score. Further the method enables a user to create a web of friends based upon the trust score obtained by each of the friends. According to an embodiment of the invention, the system has access to all social sites to which the user is operatively associated with through its component social connector The system comprises of activity aggregator , post ratings aggregator , responsiveness calculator , text analyzer , expertize analyzer and social connector Text analyzer comprises of positivity analyzer and sentiment analyzer The activity aggregator aggregates all the quantifiable activities of a user from the social sites to which the user is

registered and is operatively associated with. The aggregated quantifiable activities are factored to arrive at a cumulated activity score of the user. Responsiveness calculator measures the responsiveness of the user in the entire web based platform to which user is operatively associated with and calculates the cumulated responsiveness score. Text analyzer analyses the content of the user in entire web based platform user is operatively associated with. Further text analyzer comprises of sentiment analyzer and positivity analyzer. Sentiment analyzer extract pluralities of attitudinal information comprising sentiment, opinion, mood and emotion from the contents posted, reviewed or referred by the user and positivity analyzer use text analyzing techniques to identify the positive attitude in the comments posted and reviewed by the user in the entire web based platform the user is associated with. Text analyzer , sentiment analyzer and positivity analyzer calculate the aggregate attitude score of the user. Expertize analyzer analyzes topics of interest for the user and the accuracy of answers posted by the user in that particular topic. Expertize analyzer analyze and aggregate the list of expertize of the user in various topics. Expertize analyzer enables the network of users to select social connects or friends based on expertize of topic. Expertize analyzer further suggest the network of users an expert user in related topic when at least a user addresses a query in the topic. The social connector provide connection to social networking sites member or subscribed social sites and aggregate content or data or activities required by the engine for its calculation. According to an embodiment of the invention server computer hosts the trust ranking engine or trust ranking software. The main server computer operates in networked environment which is connected to network via network interface. Further database server provides all the persistence storage requirements of the trust ranking software including but not limiting to storing training model data, application data. LDAP server acts as a user registry which stores the entire user account details. Trust ranking software or trust ranking engine extensively uses LDAP server as user registry. According to an exemplary embodiment the deployment model comprises of HTTP server , load balancer , firewall , application server cluster , database server and LDAP server. According to an embodiment of the invention user can connect to trust ranking platform via each of plurality of client devices. Client devices includes but is not limited to desktop, laptops, handheld devices, smartphones, kiosks, tablets, PDA Personal Digital Assistant. According to an embodiment of the invention trust ranking supports multiple deployments including but not limiting to In-house deployment and Cloud deployment. Further the platform also exposes the services for third party consumption. According to an embodiment of the invention for In-house deployment of Trust Ranking engine user initiates the request for trust ranking platform via one of the client devices. Further there is firewall interception wherein the request is intercepted by corporate firewall which ensures that the request is done on allowed ports and provides other security features including but is not limited to tunneling, IP checks, protocol enablement, caching, request routing and spam filtering. Further in step of load balancing , hardware load balancer routes the request to the corporate web server based on current load so as to provide optimum response time and optimum load handling. The request proceeds to the step of web server handling. The request is handled by corporate web servers. Furthermore provide additional features like caching. Further it has plugins to route the request to the corresponding application servers. The request is further routed for application server handling. According to an exemplary embodiment exist in pluralities which are horizontally and vertically clustered to handle the peak load with acceptable Service Level Agreements SLAs. Trust Ranking software running on these servers process the request. The request is further processed to LDAP server handling. A dedicated LDAP server stores users credentials and other user profile related information. During request processing cycle, the data which needs to be persisted by software persists in database software running on database server and request is processed for database server handling. Pluralities of database servers are present in production environment to handle peak load and provide optimum response times. According to another embodiment of the invention the trust ranking software can be hosted in the cloud environment. For the purpose of this invention fiends here include but are not limited to the social contact to which the user is interconnected on the web based platform. According to an embodiment of the invention the trust score is used in grouping and ranking the friends based on their trust score. The web of

friends is created by the user based upon the trust scores obtained by the friends. The friends can be classified as most trusted friends the friends with maximum trust score, average trusted friends , the friends with average trust score and least trusted friends the friends with minimum trust score. The web of friends enable a user to share data and information with friends based upon the level of trust they share with the user. It enables a user to filter friends to share sensitive information with. It also helps to decide level of interaction with a friend. Further it enables the user for privacy setting of profile based upon the trust level of friends. Furthermore it enables user to allow permitted view of contents based upon the trust level. Still further it enables user to filter any profile information. In an alternative embodiment of the invention activity score computed by trust score of the trust ranking engine or trust ranking algorithm is used to identify the commonality of interests or activities between the user and its social contacts or friends. Further the user can be alerted by red flags raised by the Trust Ranking Engine to get know at least a potentially serious trends of its social contact. Further the social contact includes but is not limited to online companion and chat buddies. One or more of the above-described techniques can be implemented in or involve one or more computer systems. The computing environment is not intended to suggest any limitation as to scope of use or functionality of described embodiments. With reference to FIG. The processing unit executes computer-executable instructions and may be a real or a virtual processor. In a multi-processing system, multiple processing units execute computer-executable instructions to increase processing power. The memory may be volatile memory e. In some embodiments, the memory stores software implementing described techniques. Further the memory across multiple servers is clustered to replicate cache data. A computing environment may have additional features. For example, the computing environment includes storage , one or more input devices , one or more output devices , and one or more communication connections

Chapter 4 : CALCULATING TRUST SCORE ON WEB BASED PLATFORM - INFOSYS LIMITED

Research into trust and reputation of the producers of information in the Social Web is still very much in its infancy. Every day, people are forced to make trusting decisions about strangers on the Web based on a very limited amount of information.

Chapter 5 : USB2 - Calculating trust score on web based platform - Google Patents

The book "Computing with Social Trust" is out. In it you can find a chapter by Paolo Avesani and myself about my PhD work on Trust in Recommender Systems.

Chapter 6 : UCSB Social Computing Workshop / johnodonovan

Capturing Trust in Social Web Applications. John O'Donovan. Pages PDF. Trust Metrics in Recommender Systems. Paolo Massa, Paolo Avesani. Pages PDF.

Chapter 7 : dblp: John O'Donovan

'Trust' is used in a variety of ways in computing literature, and social trust is emerging as an important computational problem. This book brings together a collection of important work in computing.

Chapter 8 : Meet the CTO of a Major News Org: the FT's John O'Donovan

"John O'Donovan" Effects of Information Availability on Command-and-Control Decision Making: Performance, Trust, and Situation Awareness.