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UNIVERSITAS INDONESIA
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FACULTY OF COMPUTER SCIENCE

UNIVERSITY OF Southampton

Web Science and Big Data Analytics Conference on Information Transparency and Digital Democracy

Tuesday, 25th August 2015
Pullman Hotel Jakarta Indonesia

Supported by:

Microsoft

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Foreword

British Council

It gives me great pleasure on behalf of British Council Indonesia to welcome delegates to the 'Web Science and Big Data Analytics on Information Transparency and Digital Democracy' conference which British Council is holding in partnership with Universitas Indonesia and the University of Southampton. We are also proud to welcome our speakers today who are world leaders and innovators in the field, not only as academics but also as practitioners. I would particularly like to thank our partners at the University of Southampton, led by Dame Wendy Hall and Universitas Indonesia, led by Dr Betty Purwandari.

The 'Web Science and Big Data Analytics on Information Transparency and Digital Democracy' conference is being held as part of the Web Science and Big Data Analytics Summer School, 21-26 August which is being hosted by Universitas Indonesia which provides around 40 Indonesian students, academics, NGO, private sector and government employees with the opportunity to deepen their understanding of how web science and data analytics can be used to increase transparency and enhance good governance and democratic participation. I would like to take this opportunity to thank Universitas Indonesia and the University of Southampton for providing the expertise of their staff to lead the Summer School participants as well as our corporate partners, Microsoft Indonesia.

The conference aims to open discussions with a broader audience to explore inter-disciplinary approaches to web science and data analytics. It will do this by sharing concrete examples from around the world that demonstrate the different ways in which web science and data analytics can be used to improve access to information as well as the political process and thereby improve people's capacity to impact on public policy as well as increase public engagement.

In the UK, for example, the UK Parliament's Digital Democracy Commission launched a report in January of this year that recommends how parliament can use digital democracy to help it be more transparent, inclusive and better able to engage with democracy. Both the UK and Indonesia are playing a leading role globally as founder members of the Open Government Partnership which in Indonesia has led to innovations including Lapor! and Satu Layanan.

We look forward to hearing from our speakers and delegates today how web science and data analytics can further serve to empower and promote information transparency and digital democracy. The UK is one of the world leaders in the field and we hope that the conference will lead to greater collaboration between academia and practitioners from the UK, Indonesia and other partner countries.

Sally Goggin
Country Director
British Council Indonesia

Foreword
University of Indonesia

The University of Indonesia highly appreciates the British Council and the University of Southampton for arranging this Summer School and Conference on Web Science and big data analytics on information transparency and digital democracy.

Researchers at the University of Indonesia have conducted some studies on Twitter data about the Indonesian presidential elections in 2014. I believe that many other researchers, government officers, and practitioners have similar interests.

This occasion is great to enable us to share and discuss case studies, technologies, and potential collaboration to empower people with big data analytics on and about the Web. It would be fantastic to nurture the seeds planted in this event.

Prof. Muhammad Anis
Rector
University of Indonesia

Foreword
University of Southampton

Thank you very much to the British Council and the University of Indonesia for organising and hosting this Summer School and Conference.

This is the first Web Science Summer School on information transparency and digital democracy. Web Science and big data analytics empower citizens all over the world to actively speak out. This multidisciplinary phenomenon is being studied using the Web Observatory, which is hosted by the Web Science Trust, based at the University of Southampton.

I hope both these events will facilitate future research collaboration, and lead to stronger ties between South Asia, Australia, and the UK through the established network of the Web Science Trust Network of Labs (WSTNet).

Prof. Dame Wendy Hall, DBE, FRS, FREng
Executive Director of the University's Web Science Institute
University of Southampton

Programme
Rundown

Time	Activity
08:30 – 09:00	Registration and welcoming tea & coffee
09:00 – 09:10	Welcome address by **Prof. Muhammad Anis**, Rector, University of Indonesia
09:10 – 09:20	Welcome address by **Sally Goggin**, Country Director, British Council
09:20 – 09:45	**Keynote #1** **Setiaji S.T, M.Si.** Head of Jakarta Smart City Management Unit, DKI Jakarta **Topic : "Big Data Enhancement in Government Sector"** **Q&A**
09:45 – 10:35	**Keynote #2** **Prof. Dame Wendy Hall** Executive Director of the University's Web Science Institute, University of Southampton **Topic : "Observatories and Data Analytics for Web Science"** **Q & A**
10:35 – 11:05	Refreshment & networking break
11:05 – 12:35	**Panel Session** **Topic : "The Web Observatory and Digital Democracy"** Moderator : **Dr. Betty Purwandari**, Researcher and CIO, Faculty of Computer Science, University of Indonesia **Speaker 1 : Dr. Wolfgang Mayer** Senior Lecturer, School of Information Technology and Mathematical Sciences, University of South Australia **Topic : "Towards a Web Observatory for the South Australian Government"** **Speaker 2 : Muhammad Daud** Associate Director at Executive Office of the President **Topic : TBC**

Programme
Rundown

	Speaker 3 : Dr. Ramine Tinati Research Staff in Web and Internet Science, University of Southampton **Topic : " Social Machines Observation and Analysis: Applications for E-Government"** **Speaker 4 : Yose Rizal** CEO & Founder MediaWave Group, PoliticaWave **Topic : "Big Data for Government"** **Speaker 5 : Prof. Dame Wendy Hall** Executive Director of the University's Web Science Institute, University of Southampton **Topic : "Observatories and Data Analytics for Web Science" – Cont'd** Discussion and Q & A
12:35 – 14:00	Ishoma, Lunch and Networking break
14:00 – 14:50	**Keynote #3 : Prof. David De Roure** Professor of e-Research, University of Oxford **Topic : "Social Machines: Democratisation, Disintermediation, and Citizens at Scale"** **Q & A**
14:50 – 15:40	**Keynote #4 : Prof. Tat Seng Chua** KITHCT Chair Professor at the School of Computing, National University of Singapore **Topic : "The Use of Web Observatories for Research on Wellness and Public Events"** **Q & A**
15:40 – 15:50	**Closing remark by Teresa Birks**, Director of Education and Society, British Council
15:50 – 16:00	**Closing remark by Dr. Betty Purwandari** Researcher and CIO, Faculty of Computer Science, University of Indonesia

Terms of Reference

Web Science and Big Data Analytics Conference on Information Transparency and Digital Democracy

Introduction

The World Wide Web has been transformed from a computer application for elite researchers at CERN, the European Organisation for Nuclear Research, to applications on affordable mobile phones, which are easily operated by children and those with little or no technical knowledge.

Over the last 25 years the Web has changed humanity enormously. It has revolutionised the way people communicate, how they search for and how they share information across the world. And we are now witnessing new kinds of systems that are governed not only by computational processes, but also by collective, harnessed and social interaction between humans and our computing milieu.

All these activities generate big data both on the Web and about the Web. It is thus well worth analysing the big data generated in order to understand and anticipate evolving Web technology and its impact on society.

The study of these data is undertaken by Web Scientists using a network of Web Observatories which collect and link data on the Web. The goals are to understand the evolution of the Web, how people use it, how they influence each other and the evolution of the technology.

Astronomers use observatories to gain knowledge about celestial events. Astronomers around the world share their knowledge to build accurate pictures of galaxies and analyse them. Similarly, Web Scientists are building a global network of Web Observatories to map the digital universe and comprehend it. Big data analytics are employed with a strong interdisciplinary approach to study the Web eco-system across technical, legal and cultural borders.

Prof Dame Wendy Hall at the University of Southampton initiated the global Web Observatory project as a community group to help make big institutional and commercial data sets available to researchers in order to support the studies we need to do on an international level to explain this new social phenomenon.

An example of a Web observatory is the one hosted at the University of Southampton which supports the Theory and Practice of Social Machines project (SOCIAM) in collaboration with the universities of Oxford and Edinburgh.

The main idea of social machines is collaboration between people and technology to solve a problem. Waze (a community-based traffic and navigation app) is an example of social machine. It is a free mobile application, which shows traffic condition from information that comes from drivers using their mobile phones, sent via networks, and analysed by computers to find the best route to a destination.

The SOCIAM project provides the technical infrastructure, available datasets, analytical frameworks and visualisation tools to observe and understand social machines like Waze.

In 2012 researchers from the University of Indonesia and University of Southampton studied how the

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usage of Internet access on mobile phones in Indonesia empowered people, even those in rural areas to access information transparency and participate in political petitions on social media. The knowledge and experience to develop and utilise Web Observatories like the one being implemented as part of the SOCIAM project are needed in Indonesia to better understand and anticipate the impact of Web adoption on information transparency and digital democracy.

In March 2015 "We Are Social" reported that there were 72.7 million active Internet users and 74 million active social media users in Indonesia. On average Indonesians spent nearly 5 hours per day accessing the Internet via computers or tablets, and 3-hour Internet access per day via mobile phones.

This information highlights the potential of social media and Web usage to increase information transparency among Indonesian citizens, as well as their active participation in digital democracy.

Examples include Lapor! (Report!) and Qlue used to monitor and make reports on government services, Publish What You Pay for transparency and accountability, and Kawal Pemilu (Guard the Election) which was used to monitor the presidential election.

We need to develop a Web Observatory in Indonesia with big data analytics capabilities to examine the data generated by Indonesian citizens on the Web, understand it, and anticipate the impact. Therefore, a conference on Web Science and big data analytics is proposed to understand the challenges, leverage the potential, and broaden the national and international research collaboration among Web Scientists.

This will be the first Web observatory conference on information transparency and digital democracy. Hence, this conference will enable Indonesian researchers and NGOs working on these themes, as well as the government to study people's voices on government performance, or predict their votes on next national and regional elections.

Aims

The conference aims to raise awareness and understanding of the Web Observatory and big data analytics towards a better understanding of Indonesian citizens' contribution to information transparency and digital democracy.

Participants

NGOs, students, researchers, practitioners, and government officers, who investigate the impact of Web usage on information transparency and digital democracy, are advised to come to this conference.

Benefits

Conference participants will be exposed to current challenges in information transparency and digital democracy in Indonesia, as well as cutting edge research on Web Science and big data analytics to deal with the challenges. There will also be opportunities to build networks for further collaboration on these issues.

Speaker Profiles

Setiaji, S.T, M.Si
Head of Jakarta Smart City Management Unit, DKI Jakarta Indonesia

Title :
Big Data Enhancement in Government Sector

Mr. Setiaji is the Head of Jakarta Smart City Management Unit. He is responsible for building, developing and operating Jakarta Smart City. He is passionate about empowering individuals to innovate with technology and data.

In 2014 Mr. Setiaji organized the HackJak Application Competition, utilizing the open data of Jakarta. He also participated in developing the Mobile App for Governance (e-GOV) - used across Jakarta, as well as an app for monitoring poverty in Jakarta (m-Poverty).

ABSTRACT

Jakarta has a special position and role as the capital of the country. In carrying out its role as the country's capital, Jakarta faced with demands to act as the local government, the role of the nation's capital and regional / international role. The development of Jakarta City and the surrounding area is very fast and has very broad implications. The total population of Jakarta and Bogor-Depok-Tangerang-Bekasi-Cianjur (Bodetabekjur) called Jabodetabekjur, as a whole has exceeded 20 million. The number of people and activities that are so large, causing a variety of problems such as distribution and mobility, employment, the provision of adequate infrastructure (traffic congestion, flooding, garbage, water, etc.), social facilities and public facilities (educational facility, health facility, etc.), inequality of development results, the degradation of environmental quality etc. Jabodetabekjur has formed an ecosystem that is interlinked and influenced each other.

In anticipation of the role carried by Jakarta as the Capital of the Republic of Indonesia as well as the multi-functional role to which it aspires, "smart" mindset and action are needed as well as the effective performance of the services to support active collaboration between the Government, the public and private sectors.

The performance of the service is not only supported and relied on basic infrastructure (physical infrastructure) but also must be supported by the increased availability of social infrastructure and communications. The use of information and communication technology is the basis of modern urban to the Smart City.
Smart City can be implemented with the support of wireless and fiber-optic networks, to facilitate accessibility to some desired parameter points to be measured in order to obtain the data and the desired information in real time.

Speaker Profiles

For example, the public can monitor the accumulation of garbage in their environment or using automatic sensor when there is accumulation of garbage. Seeing the potential of Jakarta city as the capital of the world's social media, where its population is the most active in posting information online, such as Twitter and Facebook, the Provincial Government of Jakarta took the initiative to take advantage of it, by utilizing Twitter to invite the participation of the public to report the condition of flooding in Jakarta and then utilize the application Qlue as a medium for residents' report that is integrated with the Smart City platform. This results in an increase

Prof. Dame Wendy Hall, DBE, FRS, FREng
Executive Director of the University's Web Science Institute University of Southampton, U.K.

Title
Observatories and Data Analytics for Web Science

Dame Wendy Hall, DBE, FRS, FREng is a Professor of Computer Science at the University of Southampton, and is the Executive Director of the University's Web Science Institute. One of the first computer scientists to undertake serious research in multimedia and hypermedia, she has been at its forefront ever since. The influence of her work has been significant in many areas including digital libraries, the development of the Semantic Web, and the emerging research discipline of Web Science. Dame Wendy was President of the British Computer Society from 2003 to 2004.

In 2009 she became a Dame Commander of the British Empire and was elected a Fellow of the Royal Society. She is also a Fellow of the Royal Academy of Engineering.

She has also previously been Senior Vice President of the Royal Academy of Engineering, a member of the Prime Minister's Council for Science and Technology, was a founding member of the European Research Council and Chair of the European Commission's ISTAG 2010-2012. She was elected President of the Association for Computing Machinery (ACM) in July 2008, the first person from outside North America to hold this position.

She is currently a member of the World Economic Forum's Global Council on Artificial Intelligence and Robotics, and is a member of the Global Commission on Internet Governance, and is Chair of the British Council's Education Advisory Group.

ABSTRACT
Over the last 25 years the Web has evolved into a critical global infrastructure. Since its emergence in the 1990s, it has exploded into hundreds of billions of pages that touch almost all aspects of modern

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life. Little appreciated, however, is the fact that the Web is more than the sum of its pages and it is more than its technical protocols. Vast emergent properties have arisen that are transforming society. Web Science is the study of the Web as a socio-technical system. As the Web becomes increasingly significant in all our lives, studying it from an interdisciplinary perspective becomes even more important.
We are now rapidly moving into a world of data on and about the Web, which gives rise to even more opportunities and challenges. In this talk, we will explore the role of Web Science in helping us understand the origins of the Web, appreciate its current state and anticipate possible futures in order to address the critical questions that will determine how the Web evolves as a social-technical network. We will discuss the role of observatories and data analytics for the development of new methodologies for longitudinal research in Web Science.

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Dr Wolfgang Mayer
Senior Lecturer
University of South Australia, Australia

Title :
Towards a Web Observatory for the South Australian Government

Dr Wolfgang Mayer is a Senior Lecturer at the University of South Australia, Adelaide, Australia. His research interests relate to knowledge representation and reasoning methods and their application in solving real world problems. He has made contributions to information modelling methods, technologies for data exchange and software systems interoperability, business process models and underlying software implementation, expert systems for process and product customization, and fault diagnosis in software systems.

Wolfgang is a key researcher in the “Data to Decisions Collaborative Research Centre” funded by the Australian Government, where his objectives will be the construction of a scalable distributed data management platform capable of providing transparent access to information held in disparate information systems and executing distributed data analytics processes for the police forces and intelligence agencies. He participates in the global Web Observatory project, which seeks to share data and related visualisations on the Web in order to answer questions about the Web, the users of the Web and the way that each affects the other. The Australian node will focus on exploring ways to improve public policy making in areas

Speaker Profiles

such as healthcare and ageing using data contributed by government agencies, private organisations, and the public. Wolfgang has worked on the integration of enterprise data in context of industrial plant maintenance information exchange in the Oil & Gas industry, and he has contributed to data collection platforms for scientific data and the healthcare domain.

He developed methods for configuration and adaptation of business process models to the context of specific projects and viewpoints and contributed to efficient software architecture for enactment of time-sensitive processes in distributed systems.

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Muhammad Daud
Associate Director
Executive Office of the
President, Indonesia

Muhammad Daud is an Associate Director at Executive Office of the President. His duty is assisting to ensure the implementation of priority development programs with the alignment of the vision and mission of the President and Vice President. He also coordinates the implementation of the Open Government Movement of Indonesia (OGI), which seeks to make government more transparent, more participatory and more innovative. His role in previous Presidential Working Unit for Supervision and Control of Development as a manager for LAPOR! Program (Online Services for People's Complaints and Aspiration), which has been named as one of the best initiatives in the Open Government Summit 2011, and is the forerunner of Complaints Management System of the National Public Service.

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Speaker Profiles

Dr Ramine Tinati
Research Staff in Web and Internet Science
University of Southampton, U.K.

Title :
Social Machines Observation and Analysis: Applications for E-Government

Ramine is a PhD in Web Science, MSc (Distinction) in Web Science, and BSc (Honours) in Computer Science from the University of Southampton, United Kingdom. Ramine's thesis analyzes the growth Web from a technical and social perspective, developing new methods to analyse the Web at both micro and macro level. In extension to the methodology, he developed an analytical tool chain and set of software technologies to explore the role of individuals within social networking platforms such as Twitter, and Facebook. These tools provide a way to explore and visualize communications in real-time and examine the relationship between online and offline communications.

Ramine's background includes a PhD in Web Science, a MSc (Distinction) in Web Science, and BSc (Honours) in Computer Science from the University of Southampton, United Kingdom. Ramine was awarded a 4-year scholarship to fund his PhD Research, funded by the EPSRC research council.
Working in the cutting-edge Web and Internet Science group in the Electronics and Computer Science department at the University of Southampton, Ramine defended a thesis which analysed the growth the Web from a technical and social perspective, developing new methods to analyse the Web at a micro and macro level. His approach combined big data and modelling techniques derived from the computational and network sciences, and draws upon social theory in order to make sense of the emergent structure and on-going growth of the Web.

In extension to the methodology, He has developed an analytical tool chain and set of software technologies to explore the role of individuals within social networking platforms such as Twitter, Facebook. These tools provide a way to explore and visualise communications in real-time and also examine the relationship between online and offline communications. This has also provided a gateway for examining the technological and methodological approaches for using big data technologies including, Cloudera/Hadoop, Mahoot, R, and various other related analytical packages.

ABSTRACT
The global expansion of the World Wide Web is now offering new forms of human's interaction at a scale which prior to the Web, was unimaginable. The advent and advancement of mobile and sensor technologies, coupled with greater levels of intuitive software and interfaces has been adopted by various levels of society: catering for new forms of communication,

opening up new modes of business, and perhaps most important adding transparency between government and society. The result of these different types of human and machine interactions lead to the creation of social machines. By studying the Web, which represents an eco-system of social machines, we are able to start to understand how individuals and society function, at the micro, and macro. Moreover, by observing them in real-time offers stakeholders the ability to analyse, re-act and potentially forecast how societal developments. This talk will consider how observing popular social machines in real-time provides a lens on society, and in doing show will raise the questions of (1) how this can be useful for governance and data-driven policy making, and (2) how it can be a model for future government services and forms of citizen-government machinery.

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Speaker Profiles

Yose Rizal
CEO & Founder MediaWave Group Indonesia

Title :
Big Data for Government

Yose Rizal is a pioneer in Social Media Monitoring & Analysis Platform in Indonesia. His platform can capture, analyze and engage all conversation from Twitter, Facebook, Blog, Forum, News, Image and YouTube.

He sets a new standard of measurement in commercial and politic industry, with MediaWave and PoliticaWave. MediaWave is the first and leading social media monitoring for brand. MediaWave helps many leading brands in Indonesia to understand the consumer. Some of the brands are Telkomsel, BNI, Indofood, Nutrifood, BCA, Mandiri, Telkom, Indosat, XL, AHM, Toyota, Yamaha, BSM, Rohto, Softex, Bintang Toedjoe, Samsung, Lenovo, Haier, Blackberry, BAT, Garuda Food, Sinde, Mayora, Frisian Flag, Alfamart, Dulux, Indocement, Pertamina, Freeport, Tupperware, TokoOn etc.

PoliticaWave is the first and leading social media monitoring and analytics for politics. PoliticaWave helps several Governors and President in Indonesia to win the election. PoliticaWave is able to predict 12 out of 14 elections in Indonesia.

Specialties: Web 2.0 & Mobile Site, Search Engine Optimization (SEO), Social Media Marketing, Location Based Advertising, Digital Data Mining, Monitoring & Analysis, Mobile Application & Mobile Advertising, Digital Advertising, Branding, Politics, Intelligent, Strategy.

ABSTRACT
Today we live in big data era. Big data is data that exceeds the processing capacity of conventional database systems. To gain value from this data, you must choose an alternative way to process it. Many organizations have found benefit of big data and now it's about time for government to start utilize big data, because big data is all about People. Government needs to listen to people's aspiration and through big data government may able to understand how they think, how they talk, how they behave, how they connect. All in all, Understanding big data is understanding people.

Speaker Profiles

Politicawave starts to use the big data analytics for politics in 2012 in the first round of DKI election, when most of the surveys predicted that Foke-Nara will win the election, our website showed different result, that Jokowi-Ahok was the winner with only 2% differences from the KPU. So far, we have predicted 14 elections and 12 of them showed the linier correlation, the winner in social media is also the winner in the real world. This is including the 2014 presidential election, 3 days before election we already released our prediction that Jokowi-JK will win by 53.8%. This result inspires us to assist the government in getting the real picture of people condition in the society, so they can give response and correct solution to the problem promptly. We already have this initiative implemented in Bandung, to assist Major Ridwan Kamil.

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Speaker Profiles

Prof. David De Roure
Professor of e-Research
University of Oxford, U.K.

Title :
Social Machines : Democratisation, Disintermediation, and Citizens at Scale

David De Roure is Professor of e-Research at University of Oxford, where he directs Oxford's multidisciplinary e-Research Centre and is Co-Director of the Institute for the Future of Computing in the Oxford Martin School. He directed the UK Digital Social Research programme for the UK Economic and Social Research Council, for whom he now works as Strategic Advisor for Social Media data and Realtime Analytics in the current phase of the cross-council Big Data programme.

A frequent speaker and writer on the future of digital scholarship and society, David was a contributor to the European Commission's Knowledge Triangle 2050 exercise and recently participated in a UK Government review of Internet of Things. David has strategic responsibility for Digital Humanities within The Oxford Research Centre in the Humanities (TORCH), collaborates with the Oxford Internet Institute in Oxford's Web Science laboratory, and is a member of the Oxford Cyber Security Centre.

David has extensive experience in Web Science, having originally been involved in hypertext, Web, and Linked Data at University of Southampton, where he was awarded his PhD in 1990. He collaborated in bioinformatics, chemistry, environmental science, social statistics and psychology research before moving to Oxford in 2010 to the post of Professor of e-Research. He now works closely with multiple disciplines including social sciences (studying social machines), digital humanities (computational musicology), computer science (large scale distributed systems), and cyber security.

ABSTRACT
In 1999 Tim Berners-Lee predicted the rise of social machines, anticipating that "the ability to create new forms of social process would be given to the world at large, and development would be rapid". This is clearly demonstrated through today's social media, an arena where democratisation encourages participation and where new phenomena are set to emerge with increasing automation. This talk will explain the social machines perspective as a useful lens for all those engaged with sociotechnical systems – which is all of us.

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Speaker Profiles

Prof. Tat-Seng Chua
KITHCT Chair Professor
National University of Singapore, Singapore

Title :
The Use of Web Observatories for Research in Wellness and Public Events

Dr Chua is the KITHCT Chair Professor at the School of Computing, National University of Singapore. He was the Acting and Founding Dean of the School during 1998-2000. Dr Chua's main research interest is in multimedia information retrieval and social media analysis. In particular, his research focuses on the extraction, retrieval and question-answering (QA) of text, video and live media arising from the Web and social networks. He is the Director of a multi-million-dollar joint Center (named NExT) between NUS and Tsinghua University in China to develop technologies for live media search. Dr Chua is the 2015 winner of the prestigious ACM SIGMM award for Outstanding Technical Contributions to Multimedia Computing, Communications and Applications. He is the Chair of steering committee of ACM International Conference on Multimedia Retrieval (ICMR) and Multimedia Modeling (MMM) conference series. Dr Chua is also the General Co-Chair of ACM Multimedia 2005, ACM CIVR (now ACM ICMR) 2005, ACM SIGIR 2008, and ACM Web Science 2015. He serves in the editorial boards of 4 international journals. Dr Chua is the Founder of two technology startup companies.

ABSTRACT

Many people and organizations use multiple social networks to share their views and moments on many aspects of their activities. The mining of such contents along with their metadata (collectively known as the user generated contents or GGCs) enables us to study the various aspects of social habits, views, concerns and preferences of users. This talk describes the design, implementation and application of a live social observatory system named 'NExT-Live'. It incorporates an efficient and robust architecture to continually crawl live social streams from multiple social network sites, and analyzes these streams to mine social sense, phenomena, influences and mobility trends dynamically. The observatories can be used to study the evolution of public events, like an election, or personal events, like the activity timelines, demography and mobility of users. This talk outlines several examples of such applications. The talk also discusses long term research towards network of live observatories and sharing of analytics.

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