research + thought leadership + education

www.webscience.org
Web Science Trust

The Web Science Trust is an independent charitable body. It was established in 2009 to raise awareness of Web Science, and to build the foundations and framework for this important new discipline.

The origins of the Trust are found in the Web Science Research Initiative (WSRI) set up in 2006 between the Massachusetts Institute of Technology and the University of Southampton. WSRI’s aims were to coordinate and support the study of the World Wide Web, a role now assumed by the Web Science Trust.

The Web Science Trust’s main aim is to advance education and research in Web Science for the benefit of society. To this end, the Trust promotes and encourages multidisciplinary and collaborative research; provides thought leadership through a global forum of interested individuals, institutions and companies; and supports curriculum development in universities and research institutions to train future generations of Web Scientists. These activities are intended to improve the visibility and understanding of Web Science, and the issues it raises, amongst key international constituencies, including governments, industry, public and private sector enterprises, the media and the general public.

The Web Science Trust is continuing to meet these objectives by supporting, encouraging and promoting an impressive portfolio of activities within its three key areas of interest: research, thought leadership and education.

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FOREWORD

John Taylor
Chair of WST Trustee Board

It is my privilege to welcome you to the first Review of the Web Science Trust. We have set ourselves a demanding mission, and we are assembling a very impressive set of colleagues and collaborators to carry it forward. Over the past 30 years, we have seen a period of unprecedented change and innovation, from the Internet to the World Wide Web to Google and - in the last 10 years - to social networking phenomena, from Wikipedia to Facebook and Twitter.

Our mission is to promote and support the emergence of Web Science as a major new discipline that will be at the heart of understanding and managing the most important global infrastructure the world has ever seen.

In this Review we set out what we are trying to achieve, and why and how. We present, I believe, an impressive summary of what has been done so far, and outline our plans for the next few years.

As well as documenting our successes to current supporters and stakeholders, the purpose of this Review is also to encourage a much wider community of interest to get to know us, get involved with us, and help us to take this whole enterprise forward - at "webspeed".

This Review summarises the activities of the Web Science Trust since its inception in December 2009. Internet time moves swiftly. Looking back over the past year, the system we are trying to understand - the Web - has continued to evolve as rapidly as ever. The Trust has to move quickly too - this is part of the challenge and excitement of our field.

2010 began with an extraordinary demonstration of the power of the Web. On January 12, an earthquake devastated the capital of Haiti. As the world rushed to help, the relief agencies realised they had a problem. There were no detailed maps of Port au Prince. Too poor to afford a mapping agency, this piece of digital infrastructure had never been built. Two weeks later relief workers, government and citizens were using detailed maps of the entire capital. How did this happen? The use of Web-based open source mapping software provided a platform that enabled an army of volunteers to "crowd source" data. This data gradually filled in the map - details of streets and roads, buildings and amenities. As Web Scientists, we want to understand how our technology adapts and evolves to combine human energy and ingenuity in such a dramatic way. The understanding we gain through Web Science will make such examples routine.

The emergence of a Web of Data has been a key feature this year. We have witnessed governments releasing huge amounts of public data via the Web. Some of us have been centrally involved in this. People are beginning to use Open Government Data in ways the originators never imagined. For Web Scientists, the challenge is to understand how our technology adapts to accommodate this growth and innovation in our economies. We must nurture the next generation of entrepreneurs who will build the Web companies of the future. The business of Web Science needs our attention too.

The Trust, like the Web, has had to move quickly. From our involvement with the landmark BBC series, "The Virtual Revolution" to the prestigious Royal Society meeting, "Web Science - a new frontier"; we have been promoting and supporting an understanding of how the Web permeates almost everything we do. We have organised a series of workshops covering issues from ethics and privacy to curriculum design. We have organised another successful Web Science Conference and established our first Joint International Web Science Laboratories (WSTNet). We have continued to work closely with the World Wide Web Foundation to bring the benefits of the Web to more of the planet.

In setting our strategy we will continue to coordinate research, thought leadership and education around Web Science, and consolidate and expand our success in these areas. In particular, we want to show how our understanding of Web Science will promote growth and innovation in our economies. We must nurture the next generation of entrepreneurs who will build the Web companies of the future. The business of Web Science needs our attention too.

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Web Science: A New Frontier

Over the last 20 years, the World Wide Web has assumed a vital role in our lives and transformed the way people share information. People shop, socialise, trade and communicate on the Web. Few of us stop to think about how the Web works or what we would do without it. We take the Web for granted.

However, there has been a growing recognition that the Web “ecosystem” needs to be treated as an important and coherent area of study. This is Web Science. It is “science” in its broadest sense: the quest to build up an organised body of knowledge better to understand a fundamental aspect of the world in which we live—the far-reaching impact of the emerging Web on global society.

Web Science also looks to the Web of the future, one that will have even greater significance in our daily lives. The “experiential Web” will record and encode our everyday activities and personal experiences, replaying them on a range of Web-based media. A greater number of objects, from refrigerators to buses, clothing to scientific sensors, could have a Web presence. The emerging “Web of Linked Data” will link together increasing amounts of information. Such developments will give rise to new and unforeseen opportunities and issues, from wider access to the Web in the developing world to issues of privacy and trust throughout the world.

Understanding the Web has wide-reaching implications. It is on a par with other great scientific challenges, such as understanding our climate, our biological nature or the wider universe. If we are to anticipate how the Web will develop we will require insight into our own nature.

Web Science is a new frontier

Web Science brings together a new generation of enquiring and exciting minds. It is an endeavour that draws inspiration and ideas from disciplines including mathematics, physics, computer science, psychology, design, sociology, law, ecology, political science, and economics.

What’s exciting about the Web is that people are building new social systems, new systems of review, new systems of governance. My hope is that those will produce new ways of working together effectively and fairly, which we can use globally to manage ourselves as a planet.

Tim Berners-Lee

©Internet Structure, courtesy of Matthew Hurst
The Web Science Trust continues to play a leading role in developing a worldwide research agenda and detailed research “roadmap” for Web Science. The Trust also produces a range of significant papers and publications in Web Science, including the influential journal “Foundations and Trends in Web Science” published by Now Publishers. In 2011 the journal will publish the Web Science roadmap, compiled by the Trust’s Programme Directors, which will form the basis of the Trust’s research and education agenda over the coming year.

The roadmap identifies a number of research challenges fundamental to our understanding of the Web. Each research challenge can be approached either from a variety of multidisciplinary perspectives including computational, mathematical, sociological, economic or legal, or via key inter-related themes identified by the Trust, such as the openness of the Web, its dynamics, patterns and structures, its facilitation of collective intelligence, or the perennial issues of privacy, security, trust, inference and provenance. These are the current key research challenges, but we must expect them to change and evolve throughout the world. Each laboratory will have specific agreements and commitments to support the Trust’s research agenda, criteria which will be published on the Trust’s website. The annual WST Net meeting will be hosted at the University of Koblenz-Landau in 2011, alongside the annual Web Science Conference (see below).

Research

WSTNet

The Web Science Trust established the Web Science Trust Network of Laboratories (WSTNet) to bring together some of the world’s leading academic researchers in Web Science to address key research challenges, and develop new academic programmes that will enhance the growing influence of Web Science. At present, there are 10 founding laboratories, whose recent activities are detailed on page 18.

By the end of 2011, the Trust aims to have a network of up to 20 leading Web Science research laboratories around the world. Each laboratory will have specific agreements and commitments to support the Trust’s research agenda, criteria which will be published on the Trust’s website. The annual WST Net meeting will be hosted at the University of Koblenz-Landau in 2011, alongside the annual Web Science Conference (see below).

WebSci 10 and 11

The annual Web Science Conference was held in April 2010 at the Raleigh Convention Center, Raleigh, NC, USA. The aim of the conference was to “embrace physical and social sciences, drawing on computer and engineering sciences, sociology, economics, political science, law, management, geography and psychology. Web Science 2010 brings these disciplines together in creative and critical dialogue, and crosses traditional boundaries…”

Key speakers included Jennifer Chayes of Microsoft Research, Melissa R. Gilbert of Temple University and Tim Berners Lee.

The papers presented at the conference played an important part in advancing the Web Science Trust’s research roadmap, providing insights into the Web’s relations with society, individual communities, and the growing quantity of available data. Issues debated ranged from collective intelligence through to research methodologies for Web Science.

The Trust will continue to organise, support and promote the annual Web Science Conference, and the 2011 event will be the first of the series to be an Association of Computing Machinery (ACM) conference. It will take place in June at the Institute for Web Science Technologies, the University of Koblenz-Landau, Germany. Keynote speakers will include Barry Wellman, Director of NetLab at the University of Toronto, and Jaime Tevan of Microsoft Research, USA. The Web Science Conference is also supported by the International Communication Association (ICA) and by the ACM’s Special Interest Group on Hypertext, Hypermedia and the Web (SIGW eb).

Discussion Meetings

Over the last year, the Web Science Trust has held a series of workshops, discussion meetings and distinguished lectures to share and disseminate Web Science research. Each event focused on specific topics or themes, and some events were hosted and organised by WST Net as part of their contribution to the Web Science Trust.

Privacy and Identity in a Digital Age

In March 2010, the Trust presented a panel discussion at the Royal Society, London to discuss privacy and identity – a central issue in the development of the Web. Questions raised included how governments will keep our records safe, what rules there should be about our private records, and what our understanding of privacy has become in the online era of Facebook and similar initiatives.

Key speakers included Nigel Shadbolt and featured presentations by and discussions with some of the world’s leading researchers in Web Science. Issues under debate included the processes that have driven the growth of the Web, how such a large-scale structure has emerged from a simple set of protocols, how the Web works as a socio-technical system, what drives the viral uptake of certain Web phenomena and what might fragment the Web. Manuscripts of the presentations will be included in “Royal Society Transactions A” to be published in 2011.

Web Science: a new frontier

In September 2010, the Trust supported the Royal Society in organising a discussion meeting in London as one of the Society’s 350th Anniversary meetings to highlight subjects of “pivotal importance” for the future. The event was coordinated by Nigel Shadbolt and featured presentations by and discussions with some of the world’s leading researchers in Web Science. Issues under debate included the processes that have driven the growth of the Web, how such a large-scale structure has emerged from a simple set of protocols, how the Web works as a socio-technical system, what drives the viral uptake of certain Web phenomena and what might fragment the Web. Manuscripts of the presentations will be included in “Royal Society Transactions A” to be published in 2011.

The event was webcast live on royalsociety.tv, and audiences could participate remotely using the Web’s own social media such as Twitter. All the presentations are available from http://royalsociety.org/events-Web-Science-Presentations.aspx

Ethics and the Web

In December 2010, the Trust and the British Library (in association with its “Growing Knowledge” exhibition) co-sponsored a workshop to explore the ethical and moral issues raised by the Web, including the virtues appropriate to online behaviour, what counts as the ethical use of the Web for research, and how our offline ethical concepts translate to the Web environment. The workshop included keynote speeches, panel discussions and debates with an invited audience of practitioners, engineers, academic researchers and philosophers.

Workshops and discussion meetings will be held throughout the world in 2011 and 2012, including Europe, the US, South-East Asia, India and South America. Key issues under discussion will be Web indexing, Open Government Data, and why industry needs Web Science. The latter issue will be the main topic of discussion at “Profiting from the New Web”, a joint event with Intellect UK to be held in May 2011.

Each WSTNet Laboratory will be invited to suggest speakers and submit further ideas for workshops to take place throughout 2011 and 2012.
The Web Science Trust has continued to provide thought leadership to the scientific community, the public, governments, public and private enterprises. This has been achieved through public engagement, and through direct influence on key figures and organisations in government and industry.

Public Engagement

Over the past year, the Web Science Trust organised, supported and participated in a wide range of activities to engage the interest of the media and the public in Web Science. This included commissioning and writing articles for appropriate high profile, national and international publications, giving interviews online, on radio and television and in newspapers, and hosting public lectures and meetings.

Through 2011 and 2012, the Trust will continue to work with its public relations advisor, Edelman Southside, to increase the awareness of Web Science around the world.

The Virtual Revolution

The end of January 2010 marked a milestone in the Trust’s engagement with the media. The BBC screened “The Virtual Revolution”, a ground-breaking four-part documentary series produced by Dominc Crossley-Holland and presented by Aleks Krotoski about how the Web is shaping almost every aspect of our lives, both positively and negatively.

Closely advised by Nigel Shadbolt and Tim Berners-Lee, the production was open and collaborative. Co-produced with the Open University, “The Virtual Revolution” won a BAFTA Digital Emmy Award in recognition of the series’ innovative multiplatform production process.

Nigel Shadbolt at the Royal Society

Achievements and Activities

Thought Leadership

Web Science in the UK

In January 2010, the Web Science Trust co-hosted a breakfast seminar to help local businesses prepare for and anticipate the next stage of the evolution of the Web, particularly the impact of the emerging Web of Linked Data. WST Directors made a number of prominent appearances to discuss the Web and promote Web Science. In June, Wendy Hall and Tim Berners-Lee appeared in “Future Technologies”, joining a panel with Stephen Fry, Jim Haxoloff of Cambridge University and Bill Thompson, technology critic of the BBC, to discuss how current inventions could change our image of technology and the culture we live in. This was part of the Royal Society’s “See Further” celebration of its 350th anniversary.

Also in June, Nigel Shadbolt took part in The Guardian’s Activate Summit, featuring in a panel on “Politics, Democracy and Public Life” with Martha Lane-Fox, UK Digital Champion, Steven Cliff of E-Democracy, and Beth Simone Noveck, Deputy Chief Technology Officer at the White House Open Government Initiative. In November, Nigel was invited to give an open public lecture at the Royal Society, on “Opening the Information Floodgates.” He talked about the challenges and opportunities created by the emerging Web of Linked Data, and the impact it will have on our lives.

Web Science in the US

Throughout 2010 and 2011, James Hendler and Noshir Contractor delivered invited and keynote talks on Web Science at a wide range of venues. The talks were aimed at practitioners from many different disciplines and professors, in academia and the private sector.

Noshir has secured four new grants related to Web Science from the National Science Foundation and the Army Research Laboratory, while James is heading up the first undergraduate Web Science program in the US at Rensselaer Polytechnic Institute.

Web Science in India

Wendy Hall delivered the keynote address on “The Emerging Science of the Web and Why it is Important” at Compute 2010, the flagship conference of ACM Bangalore Chapter in India. On the occasion of the World Wide Web Conference 2011 in Hyderabad, Wendy, Nigel Shadbolt and Tim Berners-Lee hosted a dinner at which distinguished guests from both industry and academy, including Microsoft Research India, Wipro Technologies, W3C India, Infosys Technologies, Tata Consultancy Services, International Institute of Information Technology, Bangalore, and the Indian Institute of Technology, Hyderabad, were able to discuss the Trust’s plans to grow Web Science activity in India, particularly through the establishment of Web Science Research Laboratories.

Web Science in Brazil

In August 2010, Noshir Contractor delivered a keynote address on “From Disasters to WoH Using Web Science to Understand and Enable 21st Century Multidimensional Networks”, at a workshop to celebrate the opening of the Brazilian Institute for Web Science in Rio de Janeiro. Later in the year, Noshir gave a keynote address to the World Wide Web Consortium (W3C) Conference in Belo Horizonte.

Web Science in Greece

In May 2010, Wendy Hall gave a public lecture at Aristotle University of Thessaloniki, the largest university in Greece. She also presented a lecture to MSc students on the Web Science programme of the University, which is taught in the City of Vera. This was to commemorate the establishment of a graduate programme in Web Science, based on the study of Web assessment, mathematical modelling and operations, combined with business applications and societal transformations in the knowledge society.

Web Science in Italy

In March 2010, James Hendler visited the University of Genoa to deliver a colloquium on “Linked Open Government Data”, and a special tutorial on Web 3.0. He later gave a public talk on “The Future of the World Wide Web” at the Chamber of Commerce in that city.

Web Science in Korea

James Hendler served on the advisory board of the new Web Science and Technology programme at the Korea Advanced Institute of Science and Technology, the first major Web Science activity in that country. A symposium in February 2011 featured James together with Wendy Hall and Nigel Shadbolt as keynote speakers.

Web Science in Davos

At the World Economic Forum at Davos, Switzerland, in January 2011, Wendy Hall moderated a discussion on Web Science with Alex Pentland, Toshiba Professor of Media, Arts and Sciences at the Massachusetts Institute of Technology and author of “ Honest Signals”, Var Goldfryger, CTO, Dotomi, Israel, and instant messaging guru, and Charlie Beckett from the London School of Economics.

Web Science in High Places

In March 2011 it was confirmed that Daniel Weltszer had been appointed as Deputy Chief Technology Officer in President Obama’s White House Office of Science and Technology Policy, where his particular brief will be Internet Policy. The Web Science Trust welcomes the appointment of a strong supporter of Web Science to this key position.

The Virtual Revolution

Our relationship with the web is a synergy: as it matures, so will we. And as it draws us into its networks and its hyperlinks, we will shape them in our global image. It is the most revolutionary evolution that we as a planet have ever participated in.

ALEKS KROTOSKI, Presenter of “The Virtual Revolution” writing in The Observer 24 January 2010

©Courtesy of Aleks Krotoski
The Trust will focus on its influence with industry and government through 2011 and 2012, continuing to build relationships with key partners and sponsors.

The Web is vital for business and commerce and many of the services, industries and companies of the future will emerge from new opportunities in the evolving Web ecosystem. Part of our mission is to help chart and anticipate these developments. The WST website will play a crucial role in disseminating current and relevant information to interested parties. The Trust will work with UK government on Open Government Data, and on possible investment in a UK Web Science initiative. The Trust will help to develop a European Union approach to Web and Internet Science, and advise international governments on open data release. By the end of 2011, the Trust will plan to produce four reports of significance that influence both national and international government decision-making.

Open Data
Since 2009, Tim Berners-Lee, James Hendler and Nigel Shadbolt have been central to the development of Open Data technology and policy for the UK and US governments. Their work has provided a wealth of public data which, in particular, is being used by the community of entrepreneurial developers to create apps that can empower citizens, helping them understand and negotiate their environment.

Thanks to the efforts of the WST Directors, developers now have access to thousands of government data sets – everything from spending and crime to transport and the environment. The idea of making public data available has, as a result, really caught hold. New government commitments to transparency and data have been made, and other countries, regional authorities and individual cities are all making public data available.

The Open Data revolution is one that could apply to all sectors. We have recently been promoting its use within Higher Education and the University of Southampton has made much of its data openly available. Already students and other developers are using the data to create whole new sets of useful applications. Recently, in an article for Google’s new magazine Think Quarterly, Nigel Shadbolt argued that the approach will work for business as well – we expect to see this as a real area of development over the next few years as a Web of Data complements and extends the existing Web.

www.data.gov.uk
www.data.gov
www.data.southampton.ac.uk
www.thinkquarterly.co.uk/01-data/open-for-business/
Achievements and Activities

Education

Following on from a successful curriculum workshop at WebSci’09 in Athens, the Web Science Trust sponsored and led the development of an international curriculum for teaching Web Science and training Web practitioners and educators. The University of Southampton hosted a second annual workshop in September 2010, which produced the first draft of the Web Science Subject Categorisation that will help institutions to define and describe their Web Science curricula. The 2011 workshop will be co-located with ACM WebSci’11 at Koblenz.

The Web Science Trust website acts as a central curriculum resource, including details of what is being taught and by whom. Web Science educators are encouraged to use the website to share ideas, papers, conference and workshop proceedings and teaching materials. As part of its curriculum development, the Trust is helping to develop online curricula for distance learning.

Web Science courses are now available at a wide range of institutions including the 10 founding WSTNet Laboratories, as well as the American University of Paris, Aristotle University of Thessaloniki, UHR Web Science at ULS-Bluer, Brazilian Institute for Web Science Research, Johannes Kepler University, Semantic Technology Institute at The Open University, Millennium Institute at the University of the Highlands and Islands, and University of New Brunswick, USA. The University of Southampton has established a Web Science Doctoral Training Centre, while Rensselaer Polytechnic Institute has pioneered the teaching of Web Science at undergraduate level.

The third Web Science Doctoral Summer School will be held in July 2011 at the Digital Enterprise Research Institute, NUI Galway. The Trust’s aim is for its doctoral summer schools to become regular and renowned events, attracting leading researchers, educators and students from a diverse range of backgrounds and international laboratories. In 2012 the Doctoral Summer School will be held in The Netherlands.

The Trust will assist with establishing new Web Science research facilities at centres throughout the world, including the University of the Highlands and Islands, Massachusetts Institute of Technology, the University of Southampton and centres in South America and South Korea.

By the end of 2011, the Trust will have established an updated Web Science curriculum, including the first online MSc in Web Science, a stronger wiki presence, and distance learning resources.

Innovation

The Trust continues to work on adapting its philosophy in order to facilitate private sector innovation on the Web. Its explicit goal is to be a catalyst – an amplifier of critical methods, techniques and ideas. It achieves this goal with a threefold strategy.

• Support. It fosters the right contacts between researchers and developers. In particular, the Trust identifies relevant research, and encourages collaboration between practitioners of different disciplines, each of which can bring their own unique perspective to a set of common problems.

• Intervention. Via thought leadership and the example of the Directors’ own ground-breaking research, the Trust has helped shape the direction of the Web’s future development.

• Openness. The Trust’s own work is publicly available, and is unencumbered by restrictive IPR claims.
The Web Science Trust has enjoyed the support of a number of leading public and private enterprises. Their financial commitment and active participation in our work has enabled us to lay solid foundations in collaborative research, thought leadership and education - for which we are very grateful.

We believe the Trust has a unique position as a not-for-profit, neutral convener to offer expertise and value to corporations and governments as they explore the implications and opportunities presented by the Web.

Over the coming year the Web Science Trust is actively seeking to broaden its collaboration with companies and public policy deliverers. We will use our knowledge, networks and platforms to bring about tangible change across markets, and help deliver better, faster, commercial and social applications.

Please contact info@webscience.org to discuss how the Web Science Trust can work with you to explore the opportunities and issues that will be relevant to all of us as the Web rapidly develops and evolves.

PARTNERS AND SUPPORTERS

The Web Science Trust has helped us lay the groundwork for news transparency on the web - the web is profoundly changing media and journalism, and together with the WST we have been able to explore and anticipate these changes to develop the basis for consistent news metadata.

MARTIN MOORE, DIRECTOR, MEDIA STANDARDS TRUST

The Web Science Trust works in close partnership with the World Wide Web Foundation, set up by Tim Berners-Lee. The Foundation’s principal objective is to advance and promote the Web’s positive impact on society everywhere.

The World Wide Web Foundation has a mission to advance the Web as a medium that empowers people, regardless of language, ability, location, age or income, to communicate, collaborate and access the information that they need to change their lives and communities.

Our success will be measured by how well we foster the creativity of our children. Whether future scientists have the tools to cure diseases. Whether people, in developed and developing economies alike, can distinguish reliable information from propaganda or commercial chaff. Whether the next generation will build systems that support democracy and promote accountable debate.

TIM BERNERS-LEE

The Web Science Trust supports the Foundation’s efforts by promoting the study of the Web and its impact on society. Over the next two years, the Trust expects to be the Foundation’s lead partner with various joint programmes of work. These include promoting the Web to support Open Government Data initiatives around the world, and developing a Web Index to measure the use and impact of the Web in different regions.

Contact contact@webfoundation.org

www.webfoundation.org
Annenberg Networks Network, University of Southern California

Amongst many other activities in 2010, ANN held an event focusing on “Network Multidimensionality in the Digital Age” at the Annenberg School, USC (co-sponsored by the SONIC Lab at Northwestern University, a WST affiliate). Several WST members attended the workshop and presented papers, including Noshir Contractor, Wendy Hall and Nigel Shadbolt. Other distinguished speakers included Yochai Benkler, Manuel Castells, Bruno Latour and Ernest Wilson. Papers from the workshop have been peer reviewed and will be published in the International Journal of Communication in Spring 2011.

Decentralised Information Group, Massachusetts Institute of Technology

Throughout 2010, the group explored the technical and public policy challenges of Web information systems. Projects included HTTA, a Web protocol designed to address privacy and information misuse problems on the Web, context computing designed to mitigate privacy risks, propagator networks; and the ANTHOProject, a platform for experimenting with information accountability.

Department of Computer Science, VU Amsterdam

The Network Institute at VUA engaged in a wide variety of Web Science research and events. The Institute’s multidisciplinary nature resulted in collaborative projects related to the Web Science Trust’s research agenda, including web-oriented social network analysis and semantic analysis of public debates. In April 2010, VUA organised a symposium on self-organising knowledge systems and, in June, hosted the Dutch Semantic Technology “Meet-up”. VUA also participated in Web Science events and discussion meetings at the Royal Society, London.

Digital Enterprise Research Institute, NUI Galway

DERI was pleased to have six papers accepted at the 2010 Web Science Conference. In September, several DERI members attended the Web Science Curriculum Workshop and Royal Society discussion meetings. DERI was also involved in several EU projects relating to Web Science, including LOD2, ROBUST, and SPITFIRE, designed a PhD and Masters programme in Web Science, and has been preparing to host the Web Science Trust Doctoral Summer School in July 2011.

Institute for Web Science and Technologies (WeST), University of Koblenz-Landau

In July 2010, WeST held a Summer Academy. This enabled PhD students studying Web Science to come together, receive lectures and training from the best international scientists in the field, and share research and experiences. From November 2010 to October 2013, WeST is coordinating an EU integrated project, ROBUST (Risk and Opportunity management of huge-scale BUisiness commu’lt cooperation). The aim of ROBUST is to analyse how the health of online communities can be measured and supported in order to improve business outcomes, including innovation and marketing. The project has five academic and five industrial partners, and a budget of 10.3 million Euros to develop methods of analysis and supporting technology.

Oxford Internet Institute, University of Oxford

Oxford researchers are engaged in a variety of projects covering social, economic, political, legal, industrial, technical and ethical issues of the Internet in everyday life, governance and democracy, science and learning and shaping the Internet. WSTNet Director, Helen Margeits, was awarded a three year ESRC Professorial Fellowship for “The Internet and Political Science, re-examining collective action, governance and citizen-government interactions in the digital era”.

SONIC Lab, Northwestern University

SONIC Lab hosted seven events in 2010 as part of the SONIC Speaker Series. The invited speakers were Leslie DeChurch, Scott Field, Benjamin Elbert, Marc Smith, Thomas Freimer, Mauro Cerullini and Filip Agneessens. The lab also secured four new grants related to Web Science, and the Director, Noshir Contractor, promoted Web Science through distinguished lectures and keynote addresses at world conferences. The lab has organised the second international workshop on network theory, “Network Multidimensionality in the Digital Age” at Annenberg, Tsinghua-Southampton Web Science Laboratory at Shenzhen

In September 2010, the laboratory welcomed 15 new postgraduate students and focused its research on Web Science-related topics including human computation theory, semantic ontology and Web mining. Recent graduates are now on industrial placements for one year. Their work involves travel data analysis, Web traffic modelling and prediction, and the development of Web search engines.

Web Science Research Centre, Rensselaer Polytechnic Institute

In June 2010, Rensselaer hosted the International Provenance and Annotation Network. The event included a “Provenance Hackathon” which drew international researchers, and encouraged industry and government participation. Rensselaer’s data.gov project received national coverage for its 10th and from the front page of the US White House data.gov site. This was in recognition of the group’s leadership in developing Web Science tools, technologies and outreach materials.

Web Science Research Group, University of Southampton

Last year, the Group welcomed 17 multidisciplinary postgraduate students into its Web Science Doctoral Training Centre. Their proposed research projects spanned areas including ‘the Web of Data’, social sciences, Web traffic, data mining, collective action, protocol design and legal aspects of the Web. Their work involves travel grants and Web Science-related activities. The group is well positioned to contribute to the advancement of Web Science.

“The University of Southampton has backed the Web Science Trust to the limit, for which we are very grateful. We have a great team of people at Southampton who work in this area and who give their time and support to the Trust without question because, like us, they are inspired by the vision for Web Science.” (Wendy Hall)
The Web Science Trust is an independent charitable body hosted by the University of Southampton.

The Trust’s main aim is to advance research and education in Web Science for the benefit of society. The Trust’s activities are intended to improve the global visibility and understanding of Web Science within governments, industry, public and private sector enterprises, the media and the general public.

To find out more about the Web Science Trust, its people, programmes and events, and the opportunities to get involved, contact:

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