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EDUCATION

Doctor of Philosophy, Computing Science.

Formalizing Trust as a Computational Concept

University of Stirling

Sept 1990-June 1994

The seminal trust-related work for computational and multi-agent settings, the thesis involved the definition and testing using artificial agents of a formalism for the human notion of cooperative trust. The formalism is remarkably successful, being simple yet relatively robust. The work has subsequently been applied to areas as diverse as Computer Supported Cooperative Work, the small business startup process, autonomous agent technologies, workflow-based reasoning, and soft security systems.

Bachelor of Science, Computing Science.

University of Stirling

Sept 1990-June 1994

The course covered many theoretical and practical aspects of computer science, including programming, design, software engineering principles, and expert systems. My final year dissertation involved the implementation of and experimentation with a Kohonen Self Organising Neural Network.

EXPERIENCE

Assistant Professor, Information Systems

07/2012 to present

Faculty of Business and Information Technology

University of Ontario Institute of Technology

- Taught courses including Information Systems, Trust Systems, Security Policies and Risk Management

- Research and student supervision in computational trust and privacy for information and personal security, and critical infrastructure protection, as well as digital media
- Continuation of Device Comfort research.

Research Scientist

04/2009 to 07/2012

Communications Research Centre
Network Systems and Technologies

- Research, including formal models of trust to security aspects of critical infrastructures, regret management, and secure management models for telecommunications networks, and Device Comfort.
- Founded and led trust technologies research team.

Research Officer

06/2007 to 04/2009

National Research Council of Canada
Institute for Information Technology
Information Security Group

- Research, including examining concepts of security, trust management and regret management in the context of social networks, automated information discovery, filtering and routing, and privacy compliance.
- Novel work included the application of trust models to workflow with the intention of enhancing workflow decision processes, to allowing parallel workflow executions between organizations.

Visiting Research Fellow

06/2005 to 02/2006

University of Northumbria
School of Psychology and Sports Sciences
Division of Psychology

- Funded by University of Northumbria
- Examining the relationships of trust, forgiveness and regret in computational and social technologies
- Co-taught course on these areas.

Research Officer

01/2004 to 05/2007

Research Lead: Privacy, Security and Trust
National Research Council of Canada
Institute for Information Technology - eBusiness

- Responsible for setting up the research agenda for a new team within IIT, specialising in ICT aspects of privacy, security and trust.
- My foundational research remained focused on applying trust and other social models to information management in ad hoc, potentially mobile environments.
- This was a 3 year secondment.

Adjunct Professor

05/2008 to 07/2012

Faculty of Business and Information Technology
University of Ontario Institute of Technology

- Co-supervising a graduate student in the application of trust models to secure operation in Mobile Ad Hoc Network architectures.

Adjunct Professor

01/2003 to present

University of New Brunswick

Faculty of Computer Science

- Co-supervising graduate students (1 masters, 2 PhD) in areas of multi agent systems, trust, mobility and critical infrastructure interdependencies.
- I held an NSERC Discovery Grant at UNB.
- Co-taught multi-agent systems graduate course, also trust systems reading courses.

- Continued the development of the ACORN Multi Agent System
- Developed trust facilitation technologies for eCommerce.

Research Associate

11/1996 to 06/2001

National Research Council of Canada

Institute for Information Technology

Interactive Information

- Continued the development of the ACORN Multi Agent System
- Developed trust facilitation technologies for eCommerce.

Adjunct Research Professor

07/1999 to 06/2014

Carleton University

School of Interdisciplinary Studies

- This position enabled the co-supervision of a PhD student in the topic of trust and Active Design.
- Taught trust systems part of multi-agent systems course.

Honorary Research Associate

10/1999 to 01/2013

University of New Brunswick

School of Graduate Studies

- This position facilitated joint work on ACORN with Professors Virendra Bhavsar and Ali Ghorbani of UNB, and led to the supervision of Masters and PhD students.

Postdoctoral Research Fellow

03/1996 to 11/1996

National Research Council of Canada

Institute for Information Technology

Interactive Information

- Started the development of the ACORN project for community-based distribution and search of information

Lecturer (Assistant Professor)

08/1994 to 02/1996

Stirling University

Department of Computing Science and Mathematics

- Taught and developed new courses in Computing Science.
- Was coordinator and designed new first year courses in Computing Science, involving administrative, teaching and course development tasks.
- Supervised Masters and Bachelors students to completion of theses and projects, notably in robotics and game theory.
- Schools Liaison Officer and Recruitment Officer with responsibilities for arranging visits to the department by prospective students.
- Also during this time I was active in the development and set up of a new computer lab in the university for all students.
- Courses taught included C++ Programming (Masters course), Data Processing, Introductory Computing Science, Pascal Programming (Undergraduate courses).

Evening Degree Lecturer

02/1992 to 06/1994

University of Stirling

Department of Computing Science and Mathematics

- Taught several courses to evening students, including Introductory Computing Science and Data Processing (with COBOL) whilst completing my Ph.D.

Research Assistant

06/1990 to 11/1990

University of Stirling

Department of Computing Science and Mathematics

- Assisted Professor Harold Thimbleby in the development of the LiveWare concept, including coding and testing in C. (LiveWare was a viral system for automatic distribution and update of computer software).

AFFILIATIONS AND ACTIVITIES

- Canadian representative, IFIP Technical Committee 11, (Security and Protection in Information Systems), June 2012 to present.
- Chair (elected), International Federation of Information Processing (IFIP) Working Group 11.11: Trust Management, June 2015 to present (3 year term)
- Secretary (Elected), International Federation of Information Processing (IFIP) Working Group 11.11: Trust Management, June 2006 to June 2015 (3 x 3 year elected terms)

CURRENT RESEARCH INTERESTS

I work in the areas of computational trust, trust management, information flow, soft security, information security, human computer interactions, and social knowledge.

My research is concerned with the adaptation and adoption of human social values and skills to advanced information and communication technologies.

My current work is concerned with:

- *Computational Wisdom*: The exploration, formalization and implementation in appropriate sociotechnical systems of the human phenomenon of wisdom, with applications in information search and retrieval and information security.

- *Transparency, privacy, and social technologies*: the facilitation of information flow through networks of people and technologies, including via social mechanisms and with soft security based protections for privacy and security, and the application of social collective knowledge to information management, network and communications security, and critical infrastructure protection
- *Comfort reasoning methodologies for mobile and Ambient devices*: Device comfort is an extension of trust which uses ultra-personal devices and device-human relationships to assist people in the consideration of their own security and privacy postures.
- *Computational Trust*: Trust is a human phenomenon, but this work explores the uses of trust in the sociotechnical, and includes the examination of formal models, standardization, and application
- *Regret Management*: The use of regret as a tool for decision making in sociotechnical systems, including reputation and trust management systems, trust and distrust in security settings.

RESEARCH AWARDS

NSERC Discovery Development Grant, \$10,000 per year for two years: 2015 and 2016.

SSHRC Insight Grant – unfunded ranked 4A, 2015

Office of the Privacy Commissioner (Canada) (co-investigator) (\$45,243) – Paving the Way for Intelligent Transport Systems (ITS): The Privacy Implications of Vehicular Infotainment Platforms.

UOIT Teaching Innovation Fund (\$9,500) – NICE: Nice Idiosyncratic Comprehensive Education, 2015-2016

NSERC ENGAGE (\$22,000) – Mobile Document Security. July 2013-February 2014.

SICSA Distinguished Visiting Fellow, University of Glasgow, Scotland. £6,000, July-August 2011.

Visiting Research Fellow, University of Northumbria, Newcastle, UK Division of Psychology. December 2009 GB£3,000, October 2008 GB£3,400, June 2005-Jan 2006, GB£15,000

NSERC Discovery Grant, 2004-2007: Collaboration Agents - \$36,000 over 3 years.

British Council Researcher Exchange Award granted in 2000 to enable collaborative work exploration with Professor E. Davenport of Napier University Business School, Edinburgh, Scotland.

Joint holder of NSERC Canada grant in 2000 with Professor V. Bhavsar and Dr. A. Ghorbani of University of New Brunswick for investigating Multiple Autonomous Virtual Users with the ACORN architecture on parallel processing machines.

University of Stirling in 1995-6 to investigate new approaches to Introductory Computing Science Teaching. The research resulted in the introduction of completely new first and second semester courses in Computing Science at Stirling, with feeds in to more advanced courses.

PATENTS

A. Mawji, L.M. Chan, S. Chrapko, S. Marsh, E.V. Chrapko, Systems and Methods for Calculating a Trust Score. US Patent App. 14/664,285

PUBLICATIONS

(All students are in **Bold**)

Books

Marsh, S. *Computational Trust*. Work in progress, due for publication Summer 2017. Springer UK.

Marsh, S. and Jensen, C., *Trust Systems*. Work in progress, due for publication Summer 2017. Springer UK.

Edited Volumes

Zhang, J., Noorian, Z., Marsh, Z., 2016. Incentives and Trust in Electronic Communities, Papers from the 2016 AAAI Workshop, Phoenix, Arizona, USA, February 12, 2016. AAAI Workshops WS-16-09, AAAI Press 2016.

Diaconescu, A., Marsh, S., Pitt, J. and Steghöfer, J.P., 2016. Social Concepts in Self-organising Systems (Dagstuhl Seminar 15482). Dagstuhl Reports 5 (11).

Noorian, Z., Zhang, J., Marsh, S., Jensen, C. Incentive and Trust in E-Communities, Papers from the 2015 AAAI Workshop, Austin, Texas, USA, January 25, 2015. AAAI Workshops WS-15-08, AAAI Press 2016.

Jensen, C., Marsh, S., Dimitrakos, T. & Murayama, Y. Trust Management IV: Proceedings of the 9th Annual IFIP WG 11.11 International Conference. IFIPTM2015. Springer, IFIP AICT 454, 2015.

Marsh, S., Zhang, J., Jensen, C., Noorian, Z., Liu, Y. Proceedings of the 3rd Workshop on Incentives and Trust in E-Communities (WIT-EC14), at AAAI 2014.
<http://trust.sce.ntu.edu.sg/wit-ec14/papers/wit-ec14.pdf>

Bobillo, F. et al, 2013. Proceedings of the 10th International Workshop on Unertainty Reasoning for the Semantic Web (URSW 2014), at 13th International Semantic Web Conference.
<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.665.4803&rep=rep1&type=pdf>

Nora Cuppens-Boulahia, Philip Fong, Joaquín García-Alfaro, Stephen Marsh, Jan-Philipp Steghöfer (Eds.): Tenth Annual International Conference on Privacy, Security and Trust, PST 2012, Paris, France, July 16-18, 2012. IEEE 2012, isbn 978-1-4673-2323-9

Nishigaki, M., Josang, A., Murayama, Y. & Marsh, S., 2010. Trust Management IV: Proceedings of the 4th Annual IFIP WG 11.11 International Conference. IFIPTM2010. Springer, IFIP AICT 321, 2010.

Korba, L., Marsh, S., Safavi-Naini, R. PST 2008: Proceedings of the Conference on Privacy Security and Trust. IEEE Press. .

Etalle, S. and Marsh, S. Trust Management. Springer AICT, 2007.

Marsh, S. & Ghorbani, A. PST 2005: Proceedings of the Third Conference on Privacy, Security and Trust, St Andrews, NB. October 14th-17th, 2005

Marsh, S. PST 2004: Proceedings of the Second Conference on Privacy, Security and Trust, Fredericton, NB. October 13th-15th, 2004

Peer-Reviewed Journals

Noorian, Z., Marsh, S. And Fleming, M., 2016. zTrust: Adaptive Decentralized Trust Model for Quality of Service Selection in Electronic Marketplaces. Computational Intelligence 32(1): 127-164.

Zeinab Noorian, Jie Zhang, Yuan Liu, Stephen Marsh, and Michael Fleming, 2014. Trust-Oriented Buyer Strategies for Seller Reporting and Selection in Competitive Electronic Marketplaces. Journal of Autonomous Agents and Multi-Agent Systems (JAAMAS) 28(6):896-933.

Kosa, T. A., El-Khatib, K., and Marsh, S,
Measuring Privacy
Journal of Internet Services and Information Security, 1(4):60-73. November 2011.

Marsh, S., Briggs, P., El-Khatib, K., Esfandiari, B., Stewart, J.
Defining and Investigating Device Comfort
Journal of Information Processing, June 2011. Information Processing Society of Japan. 19:231-252. (http://www.jstage.jst.go.jp/article/ipsjjip/19/0/19_231/_article)

Marsh, S., Ghorbani, A., and Bhavsar, V.
The ACORN Multiagent System
Web Intelligence and Agent Systems, April 2003, 1(1):65-86. IOS press.

Carter, J., Ghorbani, A., and Marsh, S.

Architectural Components of Information Sharing Societies
Computational Intelligence, November 2002, 18(4):638-655

Book Chapters

Dwyer, N. and Marsh, S., 2016. To trust or distrust: Has a digital environment empowered users to proceed on their own terms? in Ries, W. et al, Trustworthy Open Self-Organizing Systems, Springer, 2016.

Marsh, S., Dwyer, N., Basu, A., El-Khatib, K., Storer, T., Esfandiari, B., Renaud, K., Briggs, P., **Bicacki, M.**, 2014. Foreground Trust as a Security Paradigm: Turning Users into Strong Links. In Kayem, A. & Meinel, C., Information Security in Diverse Environments. IGI Global. 2014.

Marsh, S., Noël, S., Storer, T., Wang, Y., Briggs, P., Robart, L., Stewart, J., Esfandiari, B., El-Khatib, K., **Bicakci, M.**, **Dao, M.**, **Cohen, M.**, and **Da Silva, D.**, 2012. Non-Standards for Trust: Foreground Trust and Second Thoughts for Mobile Security. In Proceedings STM 2011, pp28-39. Springer LNCS 7170.

Marsh, S. and Briggs, P.
Examining Trust, Regret and Forgiveness as Computational Concepts
Chapter 2 of Golbeck, J., Computing with Social Trust, Springer 2009.

Little, L., Marsh, S., and Briggs, P.
Trust and Privacy Permissions for an Ambient World.
In Sugarman, V. Intelligent Information Technologies. Information Science Reference, 2008,
pp. 2014-2042

Marsh, S., Patrick, A. & Briggs, P. Trust in Digital Government – Social Issues
In Nemati, H., Information Security and Ethics: Concepts, Methodologies, Tools, and
Applications, pp. 2905-2913. Information Science Reference, 2008..

Marsh, S., Patrick, A. & Briggs, P.
Trust in Digital Government – Social Issues
In Anttiroiko, A. & Malkia, M., Encyclopedia of Digital Government, IDEA Group, 2006.

Marsh, S. and Dibben, M.
Trust, Untrust, Distrust and Mistrust; An Exploration of the Dark(er) Side.
In Herrmann, P., Issarny, V. & Shiu, S. Proceedings of iTrust 2005. Springer Verlag, LNCS
3477 2005.

Patrick, A. S., Briggs, P. & Marsh, S.
Designing Systems that People will Trust
In Cranor, L. & Garfinkel, S. L., Designing Secure Systems That People Can Use. O'Reilly &
Associates, 2005.

Marsh, S. & Dibben, M.

The Role of Trust in Information Science and Technology
Annual Review of Information Science and Technology, 2003. Volume 35, chapter 10, pp.465-497

Thimbleby, H. W.; Marsh, S.; Jones, S. R.; Cockburn, A.
Trust in CSCW
In Scrivener, S. (Ed.), Computer Supported Cooperative Work
Ashgate Publishing. Pages 253--271. 1994.

Peer-Reviewed Conferences

Marsh, S., Dibben, M. Dwyer, N., 2016. The Wisdom of Being Wise: A Brief Introduction to Computational Wisdom. In *proceedings IFIP International Conference on Trust Management*, pp. 137-145, Springer AICT.

Basu, A., Marsh, S., Rahman, M. S., Kiyomoto, S., 2016. A Model for Personalised Perception of Policies. In *proceedings IFIP International Conference on Trust Management*, pp. 52-62. Springer AICT.

Behrooz, S. and Marsh, S., 2016. A Trust-Based Framework for Information Sharing Between Mobile Health Care Applications. In *proceedings IFIP International Conference on Trust Management*, pp. 79-95. Springer AICT.

Dwyer, N. & Marsh, S., 2015. Social Network Culture Needs the Lens of Critical Trust Research. In Jensen, C. et al (Eds.) *Proceedings of the 9th Annual IFIP WG 11.11 International Conference. IFIPTM2015*. Springer, IFIP AICT 454. pp. 125-134

Dwyer, N. & Marsh, S., 2015. The Detail of Trusted Messages: Retweets in a Context of Health and Fitness. In Jensen, C. et al (Eds.) *Proceedings of the 9th Annual IFIP WG 11.11 International Conference. IFIPTM2015*. Springer, IFIP AICT 454. pp. 183-192

Basu, A., Corena, J., Vaidya, J., Crowcroft, J., Kiyomoto, S., Marsh, S., van der Sype, Y., 2015. Lightweight practical private one-way anonymous messaging. In Jensen, C. et al (Eds.) *Proceedings of the 9th Annual IFIP WG 11.11 International Conference. IFIPTM2015*. Springer, IFIP AICT 454. pp.77-93

Laing, C., Vickers, P., Fairfax, T., Briggs, P. & Marsh, S., 2015. Context Informed Intelligent Information Infrastructures for Better Situational Awareness. In *proceedings CyberScience 2015*.

Dwyer, N. and Marsh S., 2014, What can the hashtag #trust tell us about how users conceptualise trust? In *Proceedings PST 2014*, Toronto, July 2014.

Bicacki, M., Esfandiari, B. and Marsh, S., 2014, Anomaly Detection for Mobile Device Comfort. In *proceedings IFIPTM 2014*, Singapore, July 2014.

Basu, A., Corena, J. C., Kiyomoto, S., Vaidya, J., Marsh, S. and Miyake, Y., 2014, PrefRank: fair aggregation of subjective user preferences, In proceedings of the ACM Symposium on Applied Computing (SAC) RS track, Gyeongju, Korea. 2014.

Basu, A., Corena, J. C., Kiyomoto, S., Marsh, S., Vaidya, J., Guo, G., Zhang, J. and Miyake, Y., 2014, Privacy preserving trusted social feedback, In proceedings of the ACM Symposium on Applied Computing (SAC) TRECK track, Gyeongju, Korea. 2014.

Kosa, T. A., Marsh, S. and El-Khatib, K., 2013. Privacy Representation in VANET, in Proceedings of the third ACM international symposium on Design and analysis of intelligent vehicular networks and applications, pages 39-44.

Storer, T., Marsh, S., Noel, S., Esfandiari, B., El-Khatib, K., Briggs, P., Renaud, K. & **Bicacki, M.**, 2013. Second Thoughts: Obstructive User Interfaces for Raising Security Awareness. In proceedings PST 2013. Privacy Security and Trust. Tarragona Spain, July 2013.

Marsh, S., Wang, Y., Noel, S., Robart, L. & Stewart, J., 2013. Device Comfort for Mobile Health Information Accessibility. In proceedings PST 2013. Privacy Security and Trust. Tarragona Spain, July 2013.

Dwyer, N., Basu, A. & Marsh, S., 2013. Reflections on Measuring the Trust Empowerment Qualities of Digital Designs. In Fernandez, C. & Agudo, I., in proceedings IFIPTM 2013, Malaga, Spain.

Marsh, S., Basu, A. & Dwyer, N., 2013. Security Enhancement with Foreground Trust, Comfort, and Ten Commandments for Real People. In Kayem, A. and Meinel, C., Theories and Intricacies of Information Security Problems, proceedings INTRICATE-SEC 2012. Hasso-Plattner Institut für Softwaresystemtechnik and der Universität Potsdam, pp.1—7, Technische Berichte Nr 63. 2013

Noorian, Z., Zhang, J., Fleming, M. & Marsh, S., 2012. Determining the Optimal Reporting Strategy in Competitive E-Marketplaces. In Proceedings TrustCom 2012, 11th Intl. Conference on Trust, Security and Privacy in Computing and Communications. June 2012.

Noorian, Z., Fleming, M., & Marsh, S., 2012. Towards a Design of Adaptive Incentive Mechanism in Large-e-Marketplaces, in Proceedings WIT-EC 2012, June 2012.

Noorian, Z., Noorian, M., Fleming, M., Marsh, S., 2012. A Strategic Reputation-Based Mechanism for Mobile Ad Hoc Networks. In Kosseim, L. and Inkpen, D., Advances in Artificial Intelligence. Springer LNCS 7310, pp 145-157. 2012.

Marsh, S., Basu, A. and Dwyer, N., 2012. Rendering unto Caesar the things that are Caesar's: Complex Trust and Human Understanding. In proceedings IFIPTM 2012: Trust Management VI, Surat India. Springer AICT, pp. 191-200.

Jøsang, A., Azderska, T. and Marsh, S., 2012. Trust Transitivity and Conditional Belief Reasoning. In proceedings IFIPTM 2012: Trust Management VI, Surat India. Springer AICT, pp. 68-83.

Noorian, Z., Fleming, M., & Marsh, S., 2012. Preference-oriented QoS-based service discovery with dynamic trust and reputation management, in Proceedings ACM Symposium on Applied Computing, pp 2014-2021. March 2012.

Noorian, Z., Marsh, S., and Fleming, M., 2011. Prob-Cog: an Adaptive Filtering Model for Trust Evaluation, In Trust Management V: Proceedings of IFIPTM 2011, 5th International Conference on Trust Management.

Noorian, Z., Marsh, S. and Fleming, M., 2011. Multi-Layer Cognitive Filtering by Behavioural Modeling. Proc. of 10th Int. Conf. on Autonomous Agents and Multiagent Systems (AAMAS 2011), Tumer, Yolum, Sonenberg and Stone (eds.), May, 2–6, 2011, Taipei, Taiwan,

Marsh, S. & Briggs, P., 2010. Defining and Investigating Device Comfort, In Short Papers Proceedings, IFIPTM 2010, Morioka, Japan, pp.17-24.

Marsh, S., 2010. Comfort Zones: Location-dependent trust and information management for mobile devices, in workshop proceedings, IFIPTM 2010, Morioka, Japan. pp.33-40.

Etalle, S., den Hartog, J.I. and Marsh, S., 2007. Trust and Punishment. In: International Conference on Autonomic Computing and Communication Systems (Autonomics), 28-30 October 2007. ACM Press.

Marsh, S. & Briggs, P., 2006., Trust, Forgiveness and Regret: The Internal Triangle. Proceedings CHI workshop: ReInvent06: reinventing trust, collaboration and compliance. April 2006.

Josang, A., Marsh, S. & Pope, S., 2006. Exploring Different Types of Trust Propagation. In Stoelen, K. & Winsborough, W. Trust Management: Proceedings of iTrust 2006, Italy, May 2006. Springer.

Briggs, P., Little, L., Love, S., Marsh, S., Coventry, L., 2005. Ambient Intelligence: Does Private Mean Public? In Proceedings (Volume 2) 19th British CHI Group Annual Conference: HCI 2005, Edinburgh, Scotland, September. Pp 338-340.

Marsh, S., 2004. InfoDNA, Version 2. In Proceedings PST 2004, Privacy, Security and Trust. Fredericton, Canada, October 2004.

Marsh, S., 2004. InfoDNA: Agent Enhanced Societal Judgment in Information in a Multi-Person Setting. In proceedings, COLA 2004: Workshop on Collaboration Agents, in IEEE WI/IAT 2004, Beijing, China, September 2004.

McDonald, C., Roth, G., Marsh, S., 2004. Red-Handed: Collaborative Gesture Interaction with a Projection Table. Sixth IEEE International Conference on Automatic Face and Gesture Recognition (FGR 2004), May 17-19, 2004, Seoul, Korea. IEEE Computer Society 2004. pp.773-778.

Marsh, S., Briggs, P., Wagealla, W., 2004. Considering Trust in Agent Societies. In Proceedings CHI 2004:Human factors in Computing Systems, pp. 1707-1708. Vienna, Austria

Corrie, B., Wong, H., Zimmerman, T., Marsh, S., Patrick, A.S., Singer, J., Emond, B., & Noel, S. (2003). Towards quality of experience in advanced collaborative environments. Third Annual Workshop on Advanced Collaborative Environments, June 22, Seattle

Carter, J., Ghorbani, A. & Marsh, S., 2002. Just-in-time information sharing architectures in multiagent systems. Proceedings of the first international joint conference on Autonomous agents and multiagent systems: part 2, pp. 647-654

Marsh, S., Meech, J., Dautenhahn, K. and Nowell, L., 2002. The Philosophy and Design of Socially Adept Technologies. In Proceedings CHI 2002 (Extended Abstracts, pp. 918-920.

Marsh, S., 2002. Table Manners. In Proceedings First workshop on Socially Adept Technologies, CHI 2002.

Marsh, S., Meech, J., Nowell, L., Turner, A. & Grant, H., 2001. Social Understanding in the Interface: The Philosophy and Design of Socially Adept Technologies. In proceedings INTERACT 2001, Tokyo Japan, July 2001.

Yu, H., Bhavsar V.C. Ghorbani, A., Marsh, S., 2000. Keyphrase-Based Information Sharing in the ACORN Multi-Agent Architecture, pages 245-258 of Horlait, E (Ed): Proceedings MATA 2000, Mobile Agents for Telecommunications Applications, Springer LNCS 1931. Springer-Verlag, Berlin.

Marsh, S., Meech, J. & **Dabbour, A.**, 2000. Putting Trust into ECommerce - One Page at a Time In proceedings of Autonomous Agents 2000 Workshop on Deception, Fraud, and Trust in Agent Societies. Barcelona, Spain.

Meech, J. & Marsh, S., 2000. Social Factors in ECommerce Personalisation CHI 2000 Workshop on 1-to-1 eCommerce. In CHI 2000 Extended Abstracts. ACM.

Davenport, E., Dibben, M., Marsh, S., Thimbleby, H., Rosenbaum, H., 2000. Artificial Morality: Representations of Trust in Interactive Systems, Panel Session, CHI 2000. In CHI 2000 Extended Abstracts. ACM.

Marsh, S. and Meech, J., 2000. Trust in Design. In CHI 2000 Development Consortium. Extended Abstracts, CHI 2000. ACM.

Bhavsar, V., Ghorbani, A. & Marsh, S., 1999. A Performance Evaluation of the ACORN Architecture. In Proceedings 1999 APICS Fall Conference on Mathematics/Statistics/Computer Science, November 1999.

Marsh, S., 1999. Trust, Anthropomorphism and Socially Adept Technology. Presentation given at Panel Session, Artificial Morality: Representations of Trust in Interactive Systems, (Panelists: Davenport, E., Dibben, M., Marsh, S., Thimbleby, H.) in Proceedings Interact'99 Volume II, Edinburgh, September 1999.

Marsh, S. and Masrouf, Y., 1999. Agent Augmented Community-Information: the ACORN Architecture. pp. 72-81 of Johnson, H. (Ed). Proceedings CASCON 1997: Meeting of Minds. IBM Centre for Advanced Studies, Toronto.

Marsh, S., 1997. Smart Documents, Mobile Queries: Information Provision and Retrieval Using a Multi-Agent System. In Ferguson, I. (Ed.) AI in Digital Libraries - Moving from Chaos to (More) Order, Proceedings of workshop at International Joint Conference on Artificial Intelligence, Nagoya, Japan, August 1997.

Marsh, S., 1997. A Different Approach to Information Provision and Retrieval. In Frohmann, B. (Ed.), Communication and Information in Context: Science, Technology, and the Professions. Proceedings 25th Annual Conference of the Canadian Association for Information Science, June 1997, St. Johns, Newfoundland.

Marsh, S., 1997. A Community of Autonomous Agents for the Search and Distribution of Information in Networks. In Furner, J. and Harper, D. (Eds.) Information Retrieval Research, Proceedings 18th Annual BCS-IRSG Colloquium on IR Research, Aberdeen, Scotland, April 1997. Springer series of Electronic Workshops in Computing.
<http://www.springer.co.uk/ewic/IRR97/>

Marsh, S., 1995. Exploring the Socially Adept Agent In Proceedings DIMAS'95 (Distributed Intelligent and Multi Agent Systems). Krakow, Poland. 1995. ISBN 83-86813-10-5.

Marsh, S., 1994. Optimism and Pessimism in Trust. In Geffner, H (Ed.), Proceedings IBERAMIA 1994: IV IberoAmerican Conference on Artificial Intelligence. Addison-Wesley. Pages 286 - 297. October, 1994.

Marsh, S., 1994. Trust in DAI. In Castelfranchi, C.; Werner, E. (Eds.), Artificial Societies. Springer Verlag, Lecture Notes in Artificial Intelligence, number 830. Pages 94 - 112. 1994.

Marsh, S., 1992. Trust and Reliance in Multi-Agent Systems: A Preliminary Report In Cesta, A.; Conte, R.; Miceli, M. (Eds.), MAAMAW'92, Pre-Proceedings of the 4th European Workshop on Modeling Autonomous Agents in an Artificial World. National Research Council, Italy. 1992.

Marsh, S. and Thimbleby, H. W., 1992. Trusting Agents: The Rationality of a Judgmental Approach, In Johnson, K. and Kerridge, S (Eds.). Proceedings of the Third Belief Representation

and Agent Architectures Workshop (BRAA 92). University of Durham, School of Engineering and Information Science. 1992.

Selected Invited Lectures and Keynote Lectures

Thinking about Computational Trust. **Keynote**. IFIPTM 2016, Darmstadt, Germany, July 2016.

Your Cheating Cat. Talk given at Dagstuhl Seminar on Social Aspects of Self-Organizing Systems, November 25th 2015.

All Human Values are System Values. Talk given at Dagstuhl Seminar on Social Aspects of Self-Organizing Systems, November 23rd 2015.

The WWW and W of Trust. Invited talk, University of Oxford, UK. Department of Computer Science, November 18th, 2015.

Trust in the Cloud. Talk given to visiting students at UOIT, Summer 2012, 2013, 2014 (by request).

Trust and Security: Opportunities and Hopes. Invited talk, Glasgow Caledonian University, Glasgow, Scotland. February 19th, 2013.

A Manifesto for Computational Trust. Invited talk, Tokai University, Tokyo, Japan. February 1st, 2013.

Trust and Security: Opportunities and Hopes. Invited Talk, CyberSec 2013, Nanyang Technological University, Singapore. January 28th, 2013.

Trust and Security: Links, Relationships and Family Feuds. **Keynote**, Information Security South Africa Conference, August 2012.

Putting Trust in the Foreground. **Keynote**, Workshop on Trustworthy Self-Organizing Systems, at IEEE SASO, October 2011.

Reconsidering Critical Infrastructure Interdependencies. **Keynote**, Critical Infrastructure Interdependencies workshop, Glasgow University, August 10th, 2011.

Mobile Device Security and Comfort. Invited talk, University of Aberdeen, Scotland, August 2nd, 2011.

Putting Trust in the Foreground. Invited Talk, Strathclyde University, Scotland, July 28th, 2011.

The Uses of Regret and Forgiveness. Invited Talk, University of St. Andrews, Scotland, July 26th, 2011.

Whence Computational Trust? **Keynote**, CASiUS Summer School, University of Glasgow, July 19th, 2011.

A Non-Standard for Trust. **Keynote**, Security and Trust Management (STM11), Copenhagen, June 2011.

Mobile Device Security and Comfort. Invited talk, Université de Quebec en Outaouais, February 23rd, 2011.

Exploring Mobile Device Comfort. Invited Talk, CapCHI (Ottawa ACM SigCHI Chapter), 18th January 2011.

Exploring Mobile Device Comfort. Invited Talk, University of Saskatchewan, August 23rd, 2010.

Trust and Security. Japanese Applied Security Forum invited lecture, June 24th, 2010, Tokyo.

Computational Trust Systems. Invited Seminar, University of Essex, January 2009

Trust and Trust Management. Invited Talk. DRDC-NATO IST Meeting, April 23rd, 2008

Untrust and Her Siblings. **Keynote**, International Conference on Electronic Commerce, August 2006.

Explorations into Computational Trust. Colloquium, National Research Council, May 31st 2006

Trust, regret, Forgiveness and Boing. Invited presentation, University of St Andrews, Scotland, UK, October 4th, 2005

Artificial Trust, Regret and Forgiveness. Invited presentation, Trinity College Dublin, September 30th, 2005

Trust, Untrust, Distrust and Mistrust – En Exploration of the Dark(er) Side. **Keynote**, iTrust 2005, 3rd International Conference on Trust Management, Paris, France. May 24th, 2005.

Investigating Critical Infrastructures and their Interdependencies. Colloquium, National Research Council Institute for Information Technology, November 4th, 2004.

Fostering User Trust in Emerging Mobile IP Technologies. Invited presentation, Bell University Labs Annual Conference, November 3rd 2004.

A bit of this, a bit of that. Invited presentation, Banff New Media Institute, October 1st, 2004.

The Funny Thing About Trust. Invited Lecture, University of New Brunswick Law Week, February 19th, 2004.

The Design of the Everyday. Banff New Media Institute, October 3rd, 2004.

Click to Edit Title of Rant. Invited presentation, Banff New Media Institute, summit on Collaborative Technologies, May 24th, 2003.

Socially Adept Technologies, given at Carleton University Multi Agent Systems course, March 2002

Socially Adept Technologies, given at Pacific Northwest National Labs, Richland,. WA. USA, January 2002

SociAware - Trust within the Interface Reputation in the Community... Invited talk given at MICON 2001, August 23-24th, 2001. Mitel Corp.

Socially Adept Technologies and Trust Seminar given at Carleton University Engineering Department, 23rd November 2000

Socially Adept Technologies Invited talk given at OCRI/CITO TechTalk, Nepean, 21st November 2000

Agents, eCommerce, Trust. Invited talk given at Napier University, Edinburgh, March 28th, 2000

Social Knowledge Management and Trust Invited talk given at ESRC/EPSRC Workshop on Innovation Management and Systems Engineering, University of Edinburgh, Scotland, 24th March, 2000

Agent Oriented Information Systems Invited talk at International Knowledge Management Summit, Toronto, 22-24th November, 1999

Autonomous Agents Seminar given at Carleton University CURE lab, 1st November 1999

Agent Augmented Community Information: The ACORN Architecture Seminar given at University of New Brunswick, 24th June 1999

Non refereed Articles, Technical Reports and Monographs

De Nies, T., Colin, D., Groth, P., Harris, O. And Marsh, S., 2014. Overview of method 2014: the 3rd international workshop on methods for establishing trust of (open) data. In Proceedings of the 10th International Conference on Uncertainty Reasoning for the Semantic Web - Volume 1259 (URSW'14), Fernando Bobillo, Rommel Carvalho, Davide Ceolin, Paulo C. G. DaCosta, and Claudia D'Amato (Eds.), Vol. 1259. CEUR-WS.org, Aachen, Germany, Germany, 53-54.

Letter to the editor, DLib Magazine, September 2000. Automated Digital Libraries for the Masses. <http://www.dlib.org/dlib/september00/09letters.html#Marsh>

Marsh, S., Meech, J. & Dabbour, A., 2000. Putting Trust into ECommerce - One Page at a Time In proceedings of MICON 2000 – 5th Annual Mitel Workshop on Innovation in Technology and Applications, August 25th - 26th, 2000

Jones, S. and Marsh, S., 1997. Human-Computer-Human Interaction: Trust in CSCW SIGCHI Bulletin July 1997. 29(3):36-40

Marsh, S., 1994. Formalising Trust as a Computational Concept. Technical Report TR 133, Department of Computing Science, University of Stirling, 1994.

Marsh, S., 1994. Optimism and Pessimism in Trust. Technical Report TR 117, Department of Computing Science, University of Stirling, 1994.

Marsh, S., 1993. Trust in DAI - A Discussion. Technical Report TR 106, Department of Computing Science, University of Stirling. 1993.

EDITORIAL POSITIONS FOR SCHOLARLY BOOKS AND JOURNALS, CONFERENCES AND WORKSHOPS (SELECTED)

(See also edited volumes, above)

Editor in Chief, Journal of Trust Management, Springer, 2013-
Associate Editor, Computational Intelligence, 2007-
Steering Committee Member, PST Conference, 2006-

2016:

PC Member, PST 2016.

Co-chair, IFIPTM 2016 Graduate Symposium

PC Member, HCI International, Toronto 2016

Co-chair, AAAI Workshop on Incentives and Trust in E-Communities (WIT-EC), 2012, 2013, 2015, 2016

PC Member, ACM SAC TRECK (Computational Trust Management and e-Reputation), 2005-2016

PC Member, IFIP SEC 2016.

2015:

Co-organizer, Dagstuhl Seminar on Social Aspects of Self-Organizing Systems, November 23-27, 2015.

Co-chair, AAAI Workshop on Incentives and Trust in E-Communities (WIT-EC), 2012, 2013, 2015, 2016

PC Member, ACM SAC TRECK (Computational Trust Management and e-Reputation), 2015.

PC Co-Chair, IFIPTM 2015, Germany.

PC Member, IFIP SEC 2015.

2014:

Panels and Special Sessions Chair, IFIPTM 2014, Singapore.

PC Member, IFIP SEC 2014.

PC Member, PST 2014.

PC Member, ACM SAC TRECK (Computational Trust Management and e-Reputation), 2014

2013:

Panels and Special Sessions Chair, IFIPTM 2013, Spain.

PC Member, PST 2014.

PC Member, IFIPTM 2013.

PC Member, ACM SAC TRECK (Computational Trust Management and e-Reputation), 2013

2012:

Tutorial Chair, SocInfo 2012, Switzerland.

Special Sessions Chair, IFIPTM 2012, Surat India.

Program Theme Chair (Trust) PST 2012, Paris France.

PC Member, ACM SAC TRECK (Computational Trust Management and e-Reputation), 2012.

2011:

PC Member, ACM SAC TRECK (Computational Trust Management and e-Reputation), 2011.

PC Member, IFIPTM 2011.

PC Member, ACM SAC TRECK (Computational Trust Management and e-Reputation), 2011.

2010:

General co-Chair, IFIPTM Conference on Trust Management, Morioka, Japan, June 2010.

Program Committee Chair (Trust) PST 2010, Ottawa, August 2010.

PC Member, ACM SAC TRECK (Computational Trust Management and e-Reputation), 2010

2009:

PC Member, IFIPTM 2009, US

PC Member, CNSR (Communications, Networks and Security Research) Conference, 2009

PC Member, PST 2009, Saint John NB.

2008:

PC Member, ACM SAC TRECK (Computational Trust Management and e-Reputation), 2008.

Program Co-chair, PST 2008, Privacy, Security and Trust, Fredericton, Canada

Co-chair, SPACE 2008 workshop on Supporting and Privacy in Collaborative Environments, held at IFIPTM 2008, Norway.

PC Member, IFIPTM 2008, Norway

PC Member, PST 2008.

PC Member, International Conference on Computer Mediated Social Networking (ICCMSN - 2008)

PC Member and co-organizer, MONET 2008

PC Member, 9th Annual World Congress on the Management of eBusiness

PC Member, CNSR (Communications, Networks and Security Research) Conference, 2008

PC Member, ACM SAC TRECK (Computational Trust Management and e-Reputation), 2008.

2007:

Program co-Chair, IFIPTM 2007, IFIP Conference on Trust Management

PC Member, ACM SAC TRECK (Computational Trust Management and e-Reputation), 2007.

PC Member, IEEE SECURECOMM SECOVAL (the value of security through collaboration) workshop, 2007

PC Member, 5th International Workshop on Formal Aspects in Security & Trust (FAST200)

PC Member and co-organizer, MONET 2007: MOBILE and NETWORKING Technologies for social applications

PC Member and co-organizer, SPACE 2007: Sustaining Privacy in Autonomous Collaborative Environments

2006:

PC Member, First International Conference on Belief Reasoning (IWBR2006), as part of AI2006, Hobart, Australia

PC Member, iTrust 2006 International Conference on Trust Management, Italy, May 2006

PC Member, ReInvent06 workshop on social computing in CHI 2006

PC Member, TRECK 2006: Trust, Recommendations, Evidence and other Collaboration Know-how. Dijon, France. April 2006

PC Member, IEEE SECURECOMM SECOVAL (the value of security through collaboration) workshop, September 2006

PC Member, 4th International Workshop on Formal Aspects in Security & Trust (FAST2006)

Reviewer for IEEE Transactions on Dependable and Secure Computing

2005:

Program Co-Chair, PST 2005: Conference on Privacy, Security and Trust, Fredericton, Canada, October 2005.

PC member, TRECK 2005: Trust, Recommendations, Evidence and other Collaboration Know-how. Santa Fe, New Mexico. March 2005

PC Member, CHI 2005.

2004:

Program Chair, PST 2004: Conference on Privacy, Security and Trust, Fredericton, Canada, October 2004.

Co-organiser, COLA 2004, workshop on Collaboration Agents, IEEE WI/IAT 2004, Beijing China, September 2004.

Shad Valley tutor, University of New Brunswick, 2004 on the topic of Trust and Information

Co-organiser, workshop on Trust in Ambient Societies, CHI 2004, Vienna, Austria, May 2004.

PC Member, CHI 2004.

2003:

Program Committee member for Trust Management Session at IEEE WET-ICE conference, 2003.

Co-organiser, COLA 2003, workshop on Collaboration Agents, IEEE WI/IAT 2004, Halifax, Nova Scotia, September 2003.
PC Member, CHI 2003.

2002:

Organiser of CHI 2002 workshop on Socially Adept Technologies, Minneapolis, MN. April 2002.

PC Member, CHI 2002.

2001:

Program committee member for workshop on Novel E-Commerce Applications, AI 2001, Ottawa, June 2001.

Program committee member for 4th Workshop on Deception, Fraud and Trust in Agent Societies, Montreal, 29th May 2001 as part of Autonomous Agents 2001

PC Member, CHI 2001.

2000:

PC Member, CHI 2000.

COURSES TAUGHT

Overview

My teaching style is deeply Socratic, my teaching philosophy is to engage students and instill a love of, and an understanding of the fun of learning. I have taught courses both remotely and face to face, including summer school graduate courses. My teaching reviews at UOIT have been uniformly good, ranked above the average for the Faculty and the University despite the (historic) unpopularity of the core course I have taught in Information Systems. Reviews from the graduate classes are not officially collected, but feedback has been uniformly excellent.

Courses taught at Stirling University

Computing Science 1 (included successful redesign of the course)

Computing Science 2 (likewise)

Both CS 1 and 2 were introductory CS courses including basic programming skills, algorithm design, testing, debugging skills, etc. and used the Pascal, Modula-2 and Java programming languages.

Business Programming

C++ programming (graduate course)

Courses taught at UOIT

At UOIT, I am the Information Systems professor, teaching IS and MIS to undergraduate business and graduate (MBA) students, allowing a wide range of interdisciplinary exposition. I have taught the undergraduate information systems course every semester since 2012 Fall. I have built up the course and offered it in Fall and Winter as well as, for the last three years, Summer semesters. I have taught the MBA course in Management Information Systems in Winter 2013, Winter 2014 and Winter 2015.

Other courses taught at UOIT:

INFR 4590U Undergraduate course in Topics in Information Science, Winter 2015: trust reading course for my own undergraduate students.

CSCI 5370G Graduate course in Topics in Information Science, Winter 2015: trust reading course for my own graduate students.

CSCI 5370G Graduate course in Topics in Information Science, Winter 2016: Trust Systems, a lecture and individual research-focused graduate course on Computational Trust and Trust Management

INFR 4680U/MITS 5600G Undergraduate and Masters taught course on Security Policies and Procedures/Security and Risk Management, Fall 2015 and Fall 2016

INFR 4611U Trust Systems, an interdisciplinary course focusing on Computational Trust and Trust Management for IT students. This is the first undergraduate course of its kind and topic in Canada, and quite possibly globally.

Other courses taught

I have taught reading courses on Trust and Reputation at UNB Fredericton.

I have been a guest lecturer in Babak Esfandiari's Agent course at Carleton.

For the past several years I have been a guest invited lecturer at the Trust Management Graduate Summer School at the IFIP Trust Management Conference (2007 – 2016 inclusive).

STUDENTS**PhD Theses Completed or in Progress**

Atele-Williams T. (In progress). Computational Trust for Information Handling. PhD, UOIT.

Malahfji, K. (In progress). Regret Management for Sociotechnical Systems. PhD, UOIT.

Kosa, T.A. (2015) Towards Formalizing Privacy. PhD, University of Ontario Institute of Technology, Faculty of Business and Information Technology..

Noorian, Z. (2013) zTrust: Adaptive Decentralized Trust Model for QoS Selection in Electronic Marketplaces, PhD, University of New Brunswick, Faculty of Computer Science.

Sharjari, M. (2005) Enhancing Network Survivability Using Intelligent Agents, PhD Thesis, Faculty of Computer Science, University of New Brunswick, Fredericton.

Masters Theses Completed or in Progress

Behrooz, S. (In progress) Privacy for Mobile Devices. MSc, UOIT.

Atele-Williams, T., (2013) Device Comfort: Obstructive User Interface for achieving Soft Security. Masters in Information Technology Security Thesis, Faculty of Business and IT, UOIT, Canada.

Bicacki, M.V. (2013) Anomaly Detection for Mobile Device Comfort, Master of Science, Carleton University, August 2013.

Tamari. H. (2008) Trust Parameters in Internet News Platforms. Masters Thesis, International School of New Media,, University of Lübeck, Germany

Kondratova, E. (2007) CIFS – Towards a Comprehensive Information Filtering System. MCS Thesis, Faculty of Computer Science, University of New Brunswick, Fredericton.

Carter, J. (2002). Instruments of Trust in Environments of Uncertainty, MCS Thesis, Faculty of Computer Science, University of New Brunswick, Fredericton.

Yu, H. (2000). Keyphrase-Based Information Sharing in Multi-Agent Systems, MCS. Thesis, Faculty of Computer Science, University of New Brunswick, Fredericton.

Lim, K.K. (1994). Experimenting with a Spatial Prisoners' Dilemma, M.Sc Thesis, University of Stirling, Department of Computing Science and Mathematics.

SERVICE

Faculty Graduate Admissions Committee, 2016-present

UOIT Joint Health and Safety Committee, 2016-present

UOIT Research Ethics Board, 2012 to 2016.

Curriculum Committee, Faculty of Business and IT, UOIT, 2013-2015

Faculty Graduate Admissions Committee, 2012-2015

UOIT internal assessment committee for NSERC RTI grants, 2014

NSERC Discovery Grants reviewer, 2015-present

OCE grants reviewer, 2015-present

SSHRC UK grants reviewer, 2016-present