About the Contributors

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Faruk Aydin is a captain in the Turkish Air Force. He has served various section of IT departments including administrative role. He has experience on software development, network management and information security.

Professor Paul Baines is Professor of Political Marketing at Cranfield School of Management and Course Director, MSc Management and Director, Baines Associates Limited. Paul was Managing Editor, Europe of the Journal of Political Marketing from 2010-2013. He is author/co-author of more than a hundred published articles, book chapters and books on marketing and political marketing issues. He holds bachelors, masters and doctoral degrees from The University of Manchester and a Postgraduate Certificate in Higher Education from Middlesex University. Paul is (co-)editor and co-author of numerous marketing texts, including: Political Marketing (Sage Publications, 2011), with Sir Robert Worcester, Roger Mortimore and Mark Gill, Explaining Cameron’s Coalition (Biteback Publishing, 2011), Essentials of Marketing with Chris Fill and Kelly Page (Oxford University Press, 2013) and a 4 volume book set on Propaganda with Nicholas O’Shaughnessy (Sage Publications, 2013). Paul’s marketing research consultancy experience includes studies on various communication research projects for the UK Foreign and Commonwealth Office, Home Office, and Ministry of Defence.

Cameron Brown is an Endeavour Executive Fellow. He graduated in law and psychology from the University of Melbourne and holds combined Masters level degrees from Macquarie University in international security, policing, intelligence and counter terrorism. He has also attained technical certifications in computer crime investigation, cyber-security, data recovery, and digital and network forensics. Cameron is affiliated with the Australian National University Cybercrime Observatory where he conducts in-depth research into emerging trends in forensic science, terrorism prevention, corruption, and modes
of cyber-conflict. Internationally, he has worked with Transparency International and the United Nations. In the field he has served with police task Forces, government agencies, and the private sector where his responsibilities extend to provision of technical advice, investigative guidance, forensic analysis, and expert testimony. Cameron also practices as an international lawyer with professional pursuits related to strategic cyber defense, public policy engagement, data privacy, regulatory compliance, transactional risk, incident response, crisis management, and authentication of electronically stored information.

Filipe Caldeira is Adjunct Professor at the Informatics Department of the Polytechnic Institute of Viseu, Portugal. He obtained his doctoral degree in Informatics Engineering in 2014 from the Faculty of Sciences and Technology of the University of Coimbra. He is also a researcher at the Centre for Informatics and Systems of the University of Coimbra where he recently has been involved in European research project FP7 MICIE. His main research interests include ICT security, namely, policy-based management, trust and reputation systems, Security and Critical Infrastructure Protection.

Douglas Campbell Ph.D., was born on May 9, 1954 in Portsmouth, Virginia, and is an American citizen. He graduated from Kenitra American High School, Kenitra, Morocco, in 1972. He received his Bachelor of Science degree in Journalism from the University of Kansas in 1976 and was immediately commissioned as an Ensign in the United States Navy. He joined the U.S. Naval Reserve Program as an Intelligence Officer in 1980 and was transferred to the Retired Reserve as a Lieutenant Commander on 1 June 1999. Dr. Campbell received his Master of Science degree from the University of Southern California in Computer Systems Management in 1986 and his Doctor of Philosophy degree in Computer Security from Southwest University in New Orleans, Louisiana, in 1990. Dr. Campbell is president and CEO of Syneca Research Group, Inc., a veteran-owned small business. His clients include the U.S. Federal Aviation Administration and Department of Homeland Security (including Federal Emergency Management Agency, Transportation Security Administration, and Secret Service). The majority of his recent consulting has been in physical and cybersecurity of airports (e.g., San Francisco International Airport) and seaports (e.g., Puerto Rico Ports Authority). He is the author of more than a dozen books on information assurance and U.S. Navy and U.S. Marine Corps aviation history.

Alan Chong is Associate Professor at the S. Rajaratnam School of International Studies in Singapore. He has published widely on the notion of soft power and the role of ideas in constructing the international relations of Singapore and Asia. His publications have appeared in The Pacific Review; International Relations of the Asia-Pacific; Asian Survey; East Asia: an International Quarterly; Politics, Religion and Ideology; the Review of International Studies; the Cambridge Review of International Affairs and Armed Forces and Society. He is also the author of Foreign Policy in Global Information Space: Actualizing Soft Power (Palgrave, 2007). He is currently working on several projects exploring the notion of ‘Asian international theory’. His interest in soft power has also led to inquiry into the sociological and philosophical foundations of international communication. In the latter area, he is currently working on a manuscript titled ‘The International Politics of Communication: Representing Community in a Globalizing World’. In tandem, he has pursued a fledgling interest in researching cyber security issues. He has frequently been interviewed in the Asian media and consulted in think-tank networks in the region. Alan Chong can be contacted at: iscschong@ntu.edu.sg.
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Tiago Cruz is Invited Assistant Professor at the University of Coimbra (Portugal), from where he got his PhD in Informatics Engineering, in 2012. He is also a researcher at the Centre for Informatics and Systems of the University of Coimbra. His research interests include (but are not restricted to) Broadband Network Architectures, Systems, Network Management, Security and Embedded Systems Design and Critical Infrastructure Security, with over 30 journal and conference publications in these areas. He has been involved in several European- and industry-funded research projects, with both technical and management activities.

Raymond Curts, Ph.D., was born December 2, 1946 in Philadelphia, Pennsylvania and is an American citizen. He graduated from Vandalia Community High School, Vandalia, Illinois in 1965. He received his Bachelor of Science in Aeronautical and Astronautical Engineering from the University of Illinois in 1970 and was commissioned as an Ensign in the United States Navy. In December 1972 he earned his wings as a Naval Aviator and was assigned to the U.S. Naval Base at Guantanamo Bay, Cuba. Returning to the continental United States in 1976, he became an instructor pilot in the Navy’s Advanced Jet Training Command in Beeville, Texas where he earned a Master of Arts degree in Management and Business Administration from Webster University of St. Louis, Missouri. After tours of duty in Norfolk, Virginia; Rota, Spain; and Key West, Florida, he was stationed at the Space and Naval Warfare Systems Command (SPAWAR) in Washington, DC where he spent five years as the Navy’s first Electronic Warfare Architect. During this time he earned a Ph.D. in Information Technology from George Mason University. Since retirement from the Naval service in 1992, Dr. Curts has supported a wide variety of government agencies with several major corporations. Currently he is providing Cybersecurity and systems integration support to the DoD, Intelligence Community (IC) components, the U.S. Navy and several other government agencies.

Olivier Danino is a researcher at the French Institute for Strategic Analysis. Specialist of the Israeli-Palestinian conflict, he has received the Duroselle Price for his work on Jerusalem. His research field also deals with how cyber impacts the Middle East conflicts, and with the cyber strategies adopted by states and non-states actors in this region. He has published several books on the Middle East, was invited in Israel for a simulation game on security and defense issues and has participated to international conferences on cyber terrorism.

Chris Demchak With engineering, economics, and comparative complex organization theory/political science degrees, Dr. Chris C. Demchak is the RADM Grace M. Hopper Professor of Cyber Security and Co-Director, Center for Cyber Conflict Studies (C3S), Strategic Research Department, U.S. Naval War College. Her research and many publications address global cyberspace as globally shared, insecure ‘substrate’ penetrating throughout the critical organizations of digitized societies, creating ‘cybered conflict’, and resulting in a rising ‘Cyber Westphalia’ of sovereign competitive complex socio-technical-economic systems (STESs). Demchak takes a systemic approach in focusing on emergent structures, comparative institutional evolution, adversary/defensive use of systemic cybered tools, virtual worlds/gaming for operationalized organizational learning, and designing systemic resilience against normal or adversary imposed surprise. She has taught international security studies and management, comparative organization theory, enterprise information systems, and cybersecurity for international/national security issues. Recent works include Designing Resilience (2010, co-edited); Wars of Disruption and Resilience
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**Peter Dombrowski** is a professor of strategy in the Strategic Research Department at the Naval War College. Previous positions include chair of the Strategic Research Department, director of the Naval War College Press, editor of the Naval War College Review, co-editor of International Studies Quarterly, Associate Professor of Political Science at Iowa State University and defense analyst at ANSER, Inc. He has also been affiliated with research institutions including the East-West Center, The Brookings Institution, the Friedrich Ebert Foundation, and the Watson Institute for International Studies at Brown University among others. Dr Dombrowski is the author of over fifty books, monographs, articles, book chapters and government reports. Awards include a Chancellor’s Scholarship for Prospective Leaders from the Alexander von Humboldt Foundation, the Navy Meritorious Civilian Service Medal, and the Navy Superior Civilian Service Medal. He received his B.A. from Williams College and an M.A. and Ph.D. from the University of Maryland.

**Claude Fachkha** is a cyber security researcher. In 2008, he received his Bachelor of Engineering in computer and communication from Notre Dame University. Two years later, he received his Master of Engineering in information systems security from Concordia University, Canada, where he is currently pursuing his Ph.D. degree in the Faculty of Electrical and Computer Engineering. Claude is a recipient of the prestigious Fonds de recherche du Québec – Nature et technologies (FQRNT) award. His current research interests are in the areas of computer network traffic analysis and the investigation of large-scale cyber attacks such as Distributed Denial of Service (DDoS), malware and botnet threats.

**Clement Guitton** works for the Department of Defense, Switzerland, and recently completed a PhD at King’s College London in the department of War Studies. He worked previously at the International Telecommunication Union, and as a software engineer.

**Helge Janicke** is a Reader in Computer Science and the Head of the Software Technology Research Laboratory and DMU’s Cyber Security Centre. He obtained his PhD in Computer Security in 2007 and has worked within the field of Cyber Security over the past decade. His current research activities include formal approaches applied to safety and security of industrial control systems; Technologies and methods employed in cyber warfare and the protection of Critical National Infrastructures; as well as the verification and enforcement of policies in distributed software-based systems. He is active in the research community as a reviewer for journals, funding bodies and serves on the programme committees of several international conferences in Cyber Security. Janicke published over 60 peer reviewed papers and currently chairs the International Symposium for Industrial Control System Cyber Security Research.

**Kevin Jones** is the Head of Airbus Group Innovations Cyber Operations team and is responsible for research and state of the art cyber security solutions in support of the Airbus Group (Airbus, Airbus Helicopters, and Airbus Defence & Space). He holds a BSc in Computer Science and MSc in Distributed Systems Integration from De Montfort University, Leicester where he also obtained his PhD: A Trust Based Approach to Mobile Multi-Agent System Security in 2010. He is active in the cyber security re-
search community and holds a number of patents within the domain. He has many years of experience in consultancy to aid organisations in achieving accreditation to ISO27001 standard on Information Security Management and currently acts as a senior expert consultant to the Airbus Group on matters of cyber (information) security across multiple domains and platforms. Kevin’s current research activities include Risk Assessments, Security Architectures, and Cyber Operations in; ICS/SCADA systems and Critical National Infrastructure (CNI), Security Operations Centres, Mobile Security, and Cloud Security. He currently chairs the International Symposium for Industrial Control System Cyber Security Research and is an elected expert to the Engineering and Physical Sciences Research Council (EPSRC). He has worked closely with UK Government agencies on ICS/SCADA cyber security and on European funded programmes such as the European Control System Security Incident Analysis Network. He is a Member of the BCS, IEEE, and ISC2 and accredited as a Certified Information Systems Security Professional (CISSP) and ISO27001 Lead Auditor.

Nigel Jones is a Visiting Fellow in the Defence Studies Department of King’s College London. He specialises in the people and informational dimensions of policy, strategy and plans, particularly in the security and conflict contexts. Until March 2015, he was Senior Lecturer in Cyber Defence and Information Operations at Cranfield University at the Defence Academy of the United Kingdom. Prior to joining Cranfield, he directed the UK’s Cyber Security Knowledge Transfer Network, bringing academic, public and private stakeholders together to work on innovation in contemporary cyber security challenges. This he did whilst at QinetiQ PLC where he ran a research and consultancy team. His interest in communications in security and conflict stems from his previous 16 years in the Army, that saw operational deployments in which he ran communications campaigns or provided training in audience analysis and communications planning.

Mark Maybury is Vice President and Chief Technology Officer and directs The MITRE Corporation’s independent research and development program, oversees technology transfer and commercialization, and develops the corporate technology strategy. He is a board member of the DSB, AF SAB and OMG. From 2010 to 2013, Dr. Maybury served as Chief Scientist of the Air Force, advising the Secretary and Chief of Staff on a wide range of scientific and technical issues affecting the Air Force mission. Previously, Mark was the Executive Director of MITRE’s Information Technology Division. Mark has authored or edited 10 books, more than 60 refereed publications, and was awarded patents in broadcast news understanding and personal casting. An IEEE and AAAI Fellow, Mark has served on multiple national advisory committees. He was recognized for support to the World Trade Center rescue and recovery, to the Coalition Provisional Authority in Baghdad, Iraq, and to the Presidential Terrorism Information Sharing Environment. Dr. Maybury holds an MBA from RPI and doctorate from the University of Cambridge.

Edmundo Monteiro is Full Professor at the University of Coimbra (UC), Portugal, from where he got the PhD in Electrical Engineering and the Habilitation in Informatics Engineering in 1996 and 2007 respectively. His research interests are Computer Networks, Wireless Communications, Quality of Service and Experience, Service Oriented Infrastructures, and Security. He is author of over 200 publications in books, journals, book chapters, and international conferences. He is also co-author of 9 international patents. Edmundo Monteiro is the Portuguese representative in IFIP-TC6, and senior member of IEEE Communication Society, and ACM Special Interest Group on Communications.
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Brett van Niekerk graduated with his PhD in 2012 from the University of KwaZulu-Natal, South Africa, and has completed two years of postdoctoral research into information operations, information warfare, and critical infrastructure protection. He is currently a Senior Security Analyst at Transnet and an Honorary Research Fellow at the University of KwaZulu-Natal. He is serving as secretary for the International Federation of Information Processing’s Working Group 9.10 on ICT in Peace and War, and has contributed to the ISO/IEC information security standards. He has multiple presentations and papers in information security and information warfare to his name. He also holds a BSc and a MSc in electronic engineering.

Nickolas O'Shaughnessy is Professor of Communication at Queen Mary, University of London. Previously he was Professor at the Universities of Brunel and Keele and Director of the Centre for Consumer and Social Marketing at Brunel. Prior to this, he was a Fellow (now Quondam Fellow) of Hughes Hall in the University of Cambridge, where he was also University Lecturer in Marketing. He has degrees from London, Oxford and Columbia universities, and a PhD from Cambridge. Nicholas is the author and co-author of numerous journal articles, chapters and books on marketing, propaganda (including terrorism) and political communication, including The Phenomenon of Political Marketing (Macmillan, 1990), Persuasion in Advertising (Routledge,), The Marketing Power of Emotion (Oxford,), Propaganda and Politics: Weapons of Mass Seduction (Manchester/Michigan, 2003). He is on the editorial board of various journals and is a Senior Editor of the Journal of Political Marketing. He has also been a parliamentary candidate and an (informal) adviser to John Major when Prime Minister. As a student, he was President of the Oxford Union.

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Neila Rjaibi is a University Common Core Professor of Computer Science at the Higher Institute of Commerce and Accountancy of Bizerte (ISCCB), Tunisia, since September 2008. In 2007, Neila has graduated from the University of Tunis, Higher Institute of Management (ISG). In 2010, she holds her Master Diploma. In present, she is pursuing the Ph.D. degree. Her research interests are: Software Engineering, Cyber Security Measurement and Quantification, Security Risk Management, E-learning Systems. She has participated in international conferences and served as a technical program committee member for some. Also, she has published several papers in international journals and served as a reviewer for some. And she has authored several book chapters.
Michael Robinson is a PhD student at De Montfort University’s Software Technology Research Laboratory with an interest in cyber warfare research. He has a multi-disciplinary background with Bachelor degrees in both computer science and international relations. He received his Master’s degree in computer security from De Montfort University in 2012.

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Ian Tunnicliffe is a Director at Accordance Associates. Over the past few years Ian Tunnicliffe has worked on a range of communications research, and media projects in countries across Asia, Africa and the Middle East including Syria, Iran, Iraq, Libya, Afghanistan and Pakistan. In 2013, his research work led to an invitation to testify to the United Kingdom House of Commons Defence Select Committee on understanding and communicating in the Middle East. Prior to that he served for 20 years in the British Army, seeing service on a range of operations including the First Gulf War, the withdrawal from Hong Kong, and the liberation of Kosovo and Northern Ireland. His last few years of service were in the UK Ministry of Defence (MOD), where he helped develop United Kingdom cross-government strategic communications plans in response to a number of international crises in the Balkans, Africa, Asia and especially the Middle East, during the Iraq crisis and conflict.

Tughral Yamin is the founding member and associate dean of the Centre for International Peace & Stability (CIPS). He earned his PhD from the Department of Defence and Strategic Studies from Quaid-i-Azam University Islamabad. In 2013 he was awarded a research fellowship in the International Program of the Cooperative Monitoring Center (CMC), Sandia National Laboratories (SNL) Albuquerque NM, USA to write a paper on CBMs in Cyber Space between India and Pakistan. He is the author of two books; The Evolution of Military Deterrence in South Asia; and Cyber CBMs between Pakistan and India. He is currently writing a book on peacekeeping operations in Somalia. His academic qualifications include an MSc in War Studies, MA in International Relations, BSc (hons) in War Studies and a BA in military art and sciences. He was awarded the gold medal for earning the first position in BA. He is a qualified interpreter in German language from the National University of Modern Languages Islamabad and has a first class diploma in German military language from the Federal Bureau of Languages Cologne. During his military career Professor Yamin attended the German General Staff College, Pakistan Army Command & Staff College Quetta and Pakistan Armed Forces War College Islamabad. He has taught at the Pakistan Army Command and Staff College Quetta, the National Defence University Islamabad, and the National University of Modern Languages Islamabad. Professor Yamin has delivered lectures to international audiences at the National University of Singapore; Atlantic Council, Washington DC; George Mason University, Washington DC; and National Defense University, Washington DC; on subjects
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like regional and information security. He has also delivered keynote speeches on net-centric warfare in seminars held in Singapore. He has represented his country as the senior armed forces delegate in the ASEAN Regional Forum meeting in Laos in 2005. His academic interests include India-Pakistan relations; confidence building measures; regional security; peacekeeping; peace building; conflict resolution; nuclear stability; arms control & disarmament; net-centric warfare; strategic decision making; and information security. He and his wife run a charity school for poor children in the suburbs of Islamabad.