

International Workshop on Counterterrorism and Open Source Intelligence



***The Maersk Mc-Kinney
Moller Institute***

***Counterterrorism
Research Lab***

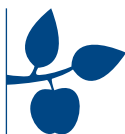


***University of
Southern Denmark***



Faculty of Engineering

27-28 October 2009



International Workshop on Counterterrorism and Open Source Intelligence

Venue: *University of Southern Denmark, Faculty of Engineering, Auditorium 2,
Niels Bohrs Allé 1, DK-5230 Odense M, Denmark*

Time: *27-28 October 2009*

Organiser: *Counterterrorism Research Lab, The Maersk Mc-Kinney Moller Institute,
Faculty of Engineering, University of Southern Denmark*

Chairs: *Professor Uffe Kock Wiil
Counterterrorism Research Lab, The Maersk Mc-Kinney Moller Institute*

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***Participation through registration only.
For registration details, visit www.ctrlab.dk***

International Workshop on Counterterrorism and Open Source Intelligence

Programme:

Tuesday October 27, 2009

- 09.00-09.30** **Opening remarks**
- 09.30-10.30** **Prof. Howard A. Schmidt**
The International State of Cyber Security, Terrorist threats or increased business risk?
- 10.30-11.00** **Coffee break**
- 11.00-12.00** **Dr. Jarret Brachman**
Bin Laden 2.0: The Rise of Abu Yahya al-Libi
- 12.00-13.30** **Lunch break**
- 13.30-14.30** **Dr. Muhammad Shoaib Suddle**
Combating Al-Qaeda Terrorism: How Pakistan Can Play a More Effective Role
- 14.30-15.30** **Dr. Ustaz Mohamed Feisal Mohamed Hassan**
Terrorist Rehabilitation: How to Break the Cycle of Radicalization
- 15.30-16.00** **Coffee break**
- 16.00-17.00** **Dr. Jonathan Farley**
The European Institute for Mathematical Methods in Counterterrorism
- 19.00-** **Dinner**

Wednesday October 28, 2009

- 09.30-10.30** **Arno H. P. Reuser**
OSINT Challenges in Today's Volatile World
- 10.30-11.00** **Coffee break**
- 11.00-12.00** **Gerhard Wagner**
Information Mining and Analysis for OSINT
- 12.00-13.30** **Lunch break**
- 13.30-14.30** **Dr. Christopher Rhodes**
An Inference Method for Inferring Covert Social Network Structures
- 14.30-15.30** **Prof. Reda Alhajj**
Terrorism within the Community of Genes: Identifying Disease Biomarkers by Social Network Analysis
- 15.30-16.00** **Coffee break**
- 16.00-17.00** **Robert Steele**
The Ultimate Hack: Re-Inventing Intelligence and Engineering to Eradicate Terrorism and All Threats to Humanity

The International State of Cyber Security, Terrorist threats or increased business risk?



Prof. Howard A. Schmidt, CISSP, CSSLP

President & CEO Information Security Forum Ltd.

Abstract

It seems that every day we hear more news about attacks against technology targets, whether they are against applications, mobile devices, enterprise systems and even home users. As society's dependence continues to grow on technology of all sorts especially internet based technology what do we have to do to increase the level of security of these systems while preserving privacy and the robust capabilities of our ICT systems. Professor Schmidt will talk about the threats, the risks and the way we combat these threats and how that technology alone does not hold the solution. His lecture will cover areas that involve "People, Processes and Technologies"

Biography

Howard A. Schmidt has had a long distinguished career in defense, law enforcement and corporate security spanning almost 40 years. He currently is the President of the Information Security Forum (ISF). He has served as Vice President and Chief Information Security Officer and Chief Security Strategist for eBay Inc. He has served in the position of Chief Security Strategist for the US CERT Partners Program for the National Cyber Security Division, Department of Homeland Security. He retired from the US White House after 31 years of public service in local and federal government.

Mr. Schmidt has been supervisory special agent and director of the Air Force Office of Special Investigations (AFOSI) computer Forensic Lab and Computer Crime and Information Warfare Division. Before AFOSI, Mr. Schmidt was with the FBI at the National Drug Intelligence Center, where he headed the Computer Exploitation Team. He is recognized as one of the pioneers in the field of computer forensics and computer evidence collection.

Mr. Schmidt also serves as the international president of the Information Systems Security Association (ISSA) and was the first president of the Information Technology Information Sharing and Analysis Center (IT-ISAC). He is the Vice-Chair of the board of Directors for (ISC)² and Security Strategist for the board.

Mr. Schmidt served as an augmented member to the President's Committee of Advisors on Science and Technology in the formation of an Institute for Information Infrastructure Protection. He has testified before congressional committees on computer security and cyber crime, and has been instrumental in the creation of public and private partnerships and information-sharing initiatives. He is a co-author of the Black Book on Corporate Security and author of "Patrolling Cyber Space, Lessons Learned from a Lifetime in Data Security".

Mr. Schmidt has been appointed to the Information Security Privacy Advisory Board (ISPAB) to advise the National Institute of Standards and Technology (NIST), the Secretary of Commerce and the Director of the Office of Management and Budget on information security and privacy issues. He has also been appointed as a member of the Permanent Stakeholders Group (PSG) for the European Network Information Security Agency. (ENISA). He is a member of the High Level Experts Group (HLEG) for the ITU and the Global Cyber-security Agenda.

Mr. Schmidt holds a bachelor's degree in business administration (BSBA) and a master's degree in organizational management (MAOM) from the University of Phoenix. He also holds an Honorary Doctorate degree in Humane Letters. Howard is an Adjunct Professor at GA Tech, GTISC, Professor of Research at Idaho State University and Adjunct Distinguished Fellow with Carnegie Mellon's CyLab and a Distinguished Fellow of the Ponemon Institute.

Combating Al-Qaeda Terrorism: How Pakistan Can Play a More Effective Role



Dr. Muhammad Shoaib Suddle, HI, QPM, PhD, MSc (Econ.), MSc (Physics), LLB

Federal Tax Ombudsman of Pakistan

Abstract

Al-Qaeda poses one of the major contemporary threats to international peace, stability and security. Its outreach is global. It impacts critically a range of current issues on the UN (and the EU's) agenda – from sustainable development to peace to human rights and the rule of law.

Immediately after 9/11 attacks, Pakistan became a frontline partner in fighting Al-Qaeda, and has since been actively involved in working together with the US-led coalition to bring the perpetrators, organizers, sponsors, abettors, supporters and harbourers of Al-Qaeda terrorism, to justice. Indeed, without Pakistan's critical support to the global fight against terror, it would have been well-nigh impossible to tame the Al-Qaeda shrew.

Pakistan's highly successful Swat offensive against - Al-Qaeda-affiliate - Taliban launched in the summer of 2009 has demonstrably shown how serious she is in fighting international terrorism. Moving its military in large numbers from the eastern borders with India to fight the Taliban, Pakistan proved to the world that countering Al-Qaeda was more important an obligation than the potential top national security threats emanating from India.

Pakistan, a responsible nuclear-armed state, continues to support the international effort to come to grips with the ravages of Al-Qaeda terrorism. However, what is needed is a comprehensive long-term result-oriented strategy. The international community needs to look beyond Al-Qaeda to the breeding grounds of terrorism. We need to fight terrorism in all its forms and manifestations. For sustainable success, we need to address the scourge of terrorism simultaneously in its short and long-term context.

A successful counterterrorism strategy requires a multi-dimensional approach. There is evidence to suggest that the Al-Qaeda increasingly relies on revenue realized through internationally and locally raised donations, by resorting to kidnappings for ransom, even through arms and drug trafficking. The challenge of suppression of the financing of terrorism requires the international community to help Pakistan come up with a viable counterterrorism strategy encompassing an integrated and workable road map how to dismantle the terrorist infrastructure for good.

While Pakistan has been able to evolve a broad national consensus in setting the political, military and intelligence strategy for the war against the Taliban, what it requires is strong international support to resolve long-standing issues with India. Only then will it seem viable to move more troops away from border with India, thus bolstering Pakistan's ongoing campaign against Al-Qaeda. Pakistan needs long-term generous economic assistance package to enable it to develop critical infrastructure, particularly in education and health sectors. Last but not least, Pakistan needs support to reform and effectively build capacity of its intelligence, police and justice-sector agencies. With international help in garnering cutting-edge actionable intelligence gathering technology, state-of-the-art data mining capability and the required 21st century counterterrorism tools and equipments, Pakistan can turn the tables on Al-Qaeda terrorism sooner rather than later.

Biography

Dr. Muhammad Shoaib Suddle currently holds the constitutional post of Federal Tax Ombudsman of Pakistan. Before reaching the age of superannuation in June 2009, he was chief of Intelligence Bureau (Pakistan's premiere civilian intel

ligence agency), following his stint as chief of police, Sindh, the second largest province of Pakistan. As Director General, Intelligence Bureau, he oversaw a number of state-of-the-art high-tech capacity building mega projects for the civilian intelligence community across Pakistan.

Dr. Suddle began his police career in 1973 and has held several key positions both at operational and strategic level in the Police Service of Pakistan. He was appointed police chief of Balochistan, the largest province of Pakistan bordering Afghanistan, the same week as 9/11. He ably commanded Balochistan police for three years before he was posted as Director General, National Police Bureau, Ministry of Interior, Pakistan.

During his time as police chief of Balochistan, the police there underwent historic transformation, not least its exceptional extension in jurisdiction: from 5 percent area, mostly urban, to the entire province. (Earlier 95 percent of Balochistan in the context of maintenance of law and order was under the age-old informal tribal system of local responsibility.)

As Director General, National Police Bureau, his responsibilities included acting as Member/Secretary of National Police Management Board (the top professional body of police chiefs in Pakistan). In this key strategic position, he contributed extensively to reshaping policing and counterterrorism policy in Pakistan. In 2000, he was seconded to work as consultant in the National Reconstruction Bureau of Pakistan when he co-authored the Police Order 2002, which replaced the 141-year-old police law in Pakistan. He has also served as Director General, Bureau of Police Research & Development, Ministry of Interior & Narcotics Control (2000-2001), police chief of Karachi from 1995-96, chief of Rawalpindi Police (1993-95), Deputy Commandant, National Police Academy (1991-93), and Director, Federal Investigation Agency from 1989-91.

He is regarded as a leading police reform and counterterrorism expert in South Asia. He is a visiting criminal justice expert at the United Nations Asia and Far East Institute on Crime Prevention and Treatment of Offenders (UNAFEI), Tokyo; advisor, Turkish National Police; and a resource person with several national and international organisations, including United Nations Office on Drugs and Crime. He is also International Director of Asia Crime Prevention Foundation, Tokyo.

He has an MSc (Econ.) in criminology and a PhD in white-collar crime from Cardiff University (Wales). He is author of several publications and articles, published both in Pakistan and abroad. He is regularly invited to speak at various international conferences around the world.



Bin Laden 2.0: The Rise of Abu Yahya al-Libi



Dr. Jarret Brachman, PhD

North Dakota State University, USA

Abstract

The man now poised to succeed Usama bin Laden as terrorist-in-chief, and the embodiment of the 'New Al-Qaida Man', is Shaykh Abu Yahya al-Libi. An obscure terrorist at the time of his 2005 prison-break, he has since enjoyed a meteoric rise into the senior ranks of al-Qaida. Abu Yahya's rockstar status within the al-Qaida movement neither occurred by chance nor overnight. It was the result of a calculated and coordinated al-Qaida media campaign. It was al-Qaida's way of rolling out a new brand. In many ways, Abu Yahya has become 'Bin Laden 2.0'. Dr. Jarret Brachman will discuss what al-Qaida is likely to look like in a post-Bin Laden age, one where the next generation of al-Qaida leaders have the reigns. He will examine al-Qaida's roll-out of Abu Yahya. And perhaps most importantly, he will show how Abu Yahya's rise is reflective of al-Qaida's reconceptualization of itself as a media group that uses terrorism rather than a terrorist group that uses the media.

Biography

Dr. Jarret Brachman is an internationally recognized specialist on al-Qaida strategy, ideology and media. From 2004 to 2008, he served as Director of Research at West Point's Combating Terrorism Center. Brachman has been invited to present his research on al-Qaida to the U.S. House Armed Services Committee's Subcommittee on Terrorism, Unconventional Threats and Capabilities, the British House of Lords, and to numerous audiences across military, intelligence and law enforcement. Brachman is routinely cited in the international press, has been interviewed on CNN, National Public Radio, and is featured in multiple documentaries about al-Qaida. In 2008, Brachman left West Point CTC and now operates one of the leading al-Qaida blogs <<http://www.jarretbrachman.net>>, conducts private consulting for U.S. clients on counterterrorism related matters, and is standing up a counterterrorism and irregular warfare research center at North Dakota State University, where he is a Research Fellow. His first book, *Global Jihadism: Theory and Practice*, was published by Routledge Press in 2008. Brachman is currently writing, *The Next Bin Ladin: The Rise of Abu Yahya al-Libi*, which will be the first English language biography of him.



Terrorist Rehabilitation: How to Break the Cycle of Radicalization



Dr. Ustaz Mohamed Feisal Mohamed Hassan

International Centre for Political Violence and Terrorism Research (ICPVTR)

Abstract

The speaker will share on terrorist rehabilitation through understanding the counter-ideological approach. Key to his presentation is the winning hearts and minds approach in terrorist rehabilitation. The speaker will highlight key ideological concepts that have been misinterpreted by radical jihadist groups. He would also present a case study of the Religious Rehabilitation Group (RRG) in Singapore's approach to counter radicalization.

Biography

Ustaz Mohamed Feisal Mohamed Hassan will present on 'Terrorist Rehabilitation: How to Break the Cycle of Radicalization'. Ustaz Feisal is a senior analyst at the International Centre for Political Violence and Terrorism Research (ICPVTR), at the S Rajaratnam School of International Studies (RSIS), Nanyang Technological University (NTU). He is also a member of the Religious Rehabilitation Group (RRG).

As a member of the RRG Secretariat and a Religious Rehabilitation Counselor, he counsels Jemaah Islamiyah's detainees and is engaged in de-radicalization programs. His professional interests are in areas of rehabilitation, counter-ideology, and prison radicalization. He has presented widely on these issues including in the US, UK, Netherlands, Singapore, Malaysia and others. In addition to Singapore, he has visited detainee centres in Southern Thailand and Philippines to conduct field work.

He graduated from the International Islamic University Malaysia with an Honors Degree in Philosophy. He obtained his Master of Arts Degree in Islamic Thought from the International Institute of Islamic Thought and Civilization (ISTAC), IIUM. His thesis is entitled "Relevance of al-Ghazali's Doctrine of Al-Wasat (The Desired Balanced Middle Way) in Countering The Ideologies of Extremists with Special Reference to the Jemaah Islamiyyah in Singapore". He also served as a Board Member at the Khadijah Mosque in Singapore.

The European Institute for Mathematical Methods in Counterterrorism



Dr. Jonathan David Farley, D.Phil. (Oxon.)

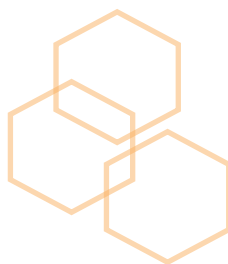
Johannes Kepler Universität Linz, Austria

Abstract

We propose the creation of a European Institute for Mathematical Methods in Counterterrorism. Such an Institute would require minimal investment but could serve as a catalyst to draw several million Euros in research grants and contracts to the host nation. This influx of funding would benefit not merely scientists and firms working in Homeland Security, but other aspects of that nation's science as well.

Biography

Dr. Jonathan David Farley has been a visiting professor of mathematics at the California Institute of Technology (Caltech), a Science Fellow at Stanford University's Center for International Security and Cooperation, and a visiting associate professor of applied mathematics at the Massachusetts Institute of Technology (MIT). Seed Magazine named him one of "15 people who have shaped the global conversation about science in 2005." He is the 2004 recipient of the Harvard Foundation's Distinguished Scientist of the Year Award, a medal presented on behalf of the president of Harvard University in recognition of "outstanding achievements and contributions in the field of mathematics." He obtained his doctorate in mathematics from Oxford University in 1995, after winning Oxford's highest mathematics awards, the Senior Mathematical Prize and Johnson University Prize, in 1994. Dr. Farley's most recent mathematical accomplishments include the solution to a problem posed by MIT professor Richard Stanley that had remained unsolved since 1981. Dr. Farley's work applying mathematics to counterterrorism has been profiled in The Chronicle of Higher Education, in Science News Online, in The Economist Magazine, in USA Today, on Fox News Television, and on Air America Radio. He is Chief Scientist of Phoenix Mathematics, Inc., a company that develops mathematical solutions to homeland security-related problems.



OSINT Challenges in Today's Volatile World



Arno H. P. Reuser

Head of Open Source Intelligence Dept. Dutch Defense Intelligence & Security Service

Abstract

Assuming that, eventually, the new Counterterrorism Research Lab will do research not only for scientific achievements but also for end-users or customers to solve certain information problems or help find solutions for information needs, the presentation will focus on problems and challenges faced by end-users working in a (very) information rich environment like intelligence and security services. Since today's information world is far more complex than anyone could anticipate at the beginning of the previous century, when there were just books, journals and newspapers and all very well retrievable through well known channels like scientific conferences, libraries, bibliographies, bookshops and the like, end users face enormous difficulties in finding the well known needle in the well known haystack. There are many types and kinds of haystacks, different in size and complexity, some hidden or fee-based, some duplicates and some original. The most well known haystack, called Internet, is also the worst information retrieval system. The presentation will focus on the information needs of an Intel OSINT shop, the challenges they face in today's information world, proposed solution and an outlook.

Biography

Arno H.P. Reuser is a professional librarian / information professional with more than 30 years experience in information handling and -processing. Arno founded the Open Source Intelligence Department of the Dutch Defence Intelligence & Security Service about 15 years ago which since then due to continuously increasing demand has seen a steady and gradual growth to a full sized department with staff, budget, policies and plans. Arno speaks regularly on international conferences and workshops on the organization and maintenance of Open Source Intelligence Services, at home and abroad. Especially the retrieval and organization of information is one of the major topics Arno is interested in. Currently he is working on developing his own Internet meta search engine that will support two of the major search strategies, i.e. Building Blocks and Successive Fractions. Arno writes his own scripts (mainly in Perl) to collect information, process and arrange information on an Intranet and to extract and store meta data. Arno started using the Internet when it did not exist in The Netherlands, learning such tools as Gopher, Archie and Veronica. He has since then done about anything legally allowed on the Net. Arno was soon in his career asked to teach OSINT which he has done since. Today, he teaches OSINT to a wide range of audience, mainly government institutions, intelligence and security services, at home and abroad, at military academies as well as universities. Emphasis during these courses is given to the world wide information landscape and general purpose search strategies, to show that the Internet is not the best information source out there. Arno has a.o. been to the United States, Switzerland, Austria, United Kingdom to teach. He founded his own company (Reuser's Information Services) in January 2008 to handle the demand for his courses more efficiently. In 2006 en 2007, up to seven one-week courses were designed and lectured for the EU Consilium where in total about 100 analysts were trained in using OSINT the best possible way. The previous EDA pilot course on OSINT was taught by Arno. Arno was awarded a Golden Candle Award in 2003 and a Lifetime Award in 2004. He writes book chapters on OSINT and its role in Intelligence, and journal articles, like 'When InterNET is InterNOT', published jan/feb 2008 Online Magazine.

Information Mining and Analysis for OSINT



Gerhard Wagner

European Commission's Joint Research Centre

Abstract

Information mining from open sources requires research into ways to retrieve, extract and analyse data. The Joint Research Centre's OPTIMA research group is conducting research to advance these areas in order to support its broader mission to provide scientific technical support to EU policies concerned with global security and crisis management. The talk is structured into three parts.

Basic Scientific Challenges

- Multi Lingual Environment (Computational Linguistics). To effectively support EU policies multi-linguality is a cornerstone of our research effort. Therefore, we aim to find ways how to extract information in a -as much as possible- language 'agnostic' way. Nevertheless, the need for semantic analysis of content means to retain a dependency on language specific resources -Scale of Information and Timeliness The timeliness of extracted information is of very high importance. Especially, in the domain of early warning and alerting. Therefore, fundamental computer science concepts have to be applied to deal with large data sets in a scalable manner.

- Evolution of Internet and Web technology. The web consists no longer of static HTML pages. An increasing amount of information is published using constantly changing means. The level of interaction between the user (in our research setting the retrieval client tools) and the web applications becomes ever more dynamic.

EMM Family of Applications

The EMM Family of Applications is the outcome of years of research work. The core of EMM started when we were tasked to develop a media monitoring application for the European Commission. Recently we are focusing more and more resources towards research to support policies on global security. The result are new techniques to do automatic extraction of geo located events and a desktop suite for OSINT analysts in law enforcement.

Current and Future Research Topics

The last part of the talk gives a more in-depth look at selected research topics important for OSINT such as -Multi lingual and cross lingual entity detection -Geo Location/Geo Indexing Furthermore, an outlook of future research will be given. This includes areas such as:

- Sentiment detection (also referred to as tonality or bias) -Automatic information summarisation.

Biography

Gerhard Wagner works for the European Commission's Joint Research Centre in the GlobeSec unit of the Institute for the Protection and Security of the Citizen. He leads the EMM OSINT Suite research activity as part of the OPTIMA action's research agenda. A part of this activity is to make the research results of the OPTIMA action available to OSINT analysts in law enforcement and public institutions. Before joining the European Commission, he worked as a software architect in the industry. His main expertise was in the design of scalable systems based on open standards. He holds a Master's degree in Informatics from the University of Coblence in Germany. Last year he was co-chair of the first European Conference on Intelligence and Security Informatics - EuroISI 2008.

An inference method for inferring covert social network structures



Dr. Christopher Rhodes, PhD

Imperial College London, UK

Abstract

Social network analysis is playing an increasing role as a means of representing and comprehending the organisational structure and capabilities of terrorist and insurgency groups. It is a particular challenge to elucidate the pattern of links within social networks that consist of significant numbers of individuals. The resources (labour and time) needed to accurately map a social network grow rapidly with the size of the network of interest. These issues are particularly acute in the case of rapidly changing social networks and are compounded when the group in question seeks to remain covert or undetected. If network structures are to be proposed in a timely manner to the operational analyst community then methods are needed that can generate plausible topologies which exploit multiple fragmentary, and often sparse, data sources. Here we look at a statistical inference approach to generating candidate network structures from a representative open-source social network.

Biography

Dr Christopher Rhodes is currently a Research Councils of the UK Research Fellow in the Networks and Complexity Programme of the Institute of Mathematical Sciences at Imperial College London. This programme comprises of a collection of researchers with a common interest in understanding and modelling complex systems across diverse disciplines. Dr Rhodes has a long-standing interest in network modelling and social network analysis for defence and security applications. In addition he has worked on developing analytical approaches to deriving insight from the fragmentary and often ambiguous data that are typically the source material for counter-terrorism operations and studies. Prior to joining Imperial College in 2005, Dr Rhodes was a research scientist in the Defence Science and Technology Laboratory, and before that a research fellow at the University of Oxford. Dr Rhodes acts as an independent advisor to the UK Government.

Terrorism within the community of genes: identifying disease biomarkers by social network analysis



Prof. Reda Alhajj, PhD

University of Calgary, Canada

Abstract

Recently, an interest in the discovery of social communities has received more attention, in particular since the appearance of web-based communities. This has led to a shift into the automated analysis of social networks using data mining and machine learning techniques which is very promising and expected to dominate several aspects of daily life. In this talk, we consider genes as actors of a social network, a research area that has not yet received attention in the literature of social network mining and analysis. Our target is to study social networks of genes and to investigate terrorism within the genes' community. Human terrorists disturb the humanity and genes that cause diseases do disturb the whole body. We argue that studying terrorism within the body is equally important. Even though our research project covers both genes and proteins, we concentrate in this work on genes; we first try to describe the gene expression data and how genes interactions can be realized as a social network. Then we describe how data mining techniques could reveal important information by identifying disease biomarkers from the social communities of genes. This is possible because of the way genes interact and form communities that are anticipated to have certain effects on the different processes that take place within an organism. Gene communities both contribute to the development of an organism by coding proteins, and on the other hand gene communities could disturb the whole humanity by acting illegally and causing serious diseases. In this talk, we concentrate on genes that act as cancer biomarkers; the same methodology applies to other diseases; we started with cancer for being one of the serious diseases threatening the humanity. We apply a multi-objective clustering approach to produce alternative clustering solutions and then we derive a matrix that reflects the link between genes based on their common occurrence on the same cluster within different alternative solutions. The latter matrix leads to the social network of genes, which is then analyzed to discover the communities and the central genes within each community. The latter genes are studied further as cancer biomarkers. The test results are promising in demonstrating the applicability and effectiveness of the developed mining based methodology.

Biography

Reda Alhajj received his B.Sc. degree in Computer Engineering in 1988 from Middle East Technical University, Ankara, Turkey. After he completed his B.Sc. with distinction from METU, he was offered a full scholarship to join the graduate program in Computer Engineering and Information Sciences at Bilkent University in Ankara, where he received his M.Sc. and Ph.D. degrees in 1990 and 1993, respectively. Currently, he is Professor in the Department of Computer Science at The University of Calgary, Alberta, Canada. He published over 300 papers in prestigious journals and refereed international conferences. He served on the program committee of several international conferences including IEEE ICDE, IEEE ICDM, IEEE IAT, SIAM DM, etc. He also served as guest editor of several special issues and is currently the Program Chair of IEEE IRI 2009, CaSoN 2009, ASONAM 2009, ISICIS 2009, MS 2009 and OSINT-WM 2009. He is on the editorial board of several journals and associate editor of IEEE SMC- Part C. He frequently gives invited talks in North America, Europe and the Middle East. Dr. Alhajj's has a research group of 15 PhD and 10 MSc students working primarily in the areas of biocomputing and biodata analysis, data mining, multiagent systems, schema integration and re-engineering, social networks and XML. He received Outstanding Achievements in Supervision Award from the Faculty of Graduate Studies at the University of Calgary. Dr. Alhajj recently received with Dr. Jon Rokne donation of equipment valued at \$5 million from RBC and Teradata in support of their research on Computational Intelligence and Bioinformatics.

The Ultimate Hack: The Ultimate Hack: Re-Inventing Intelligence and Engineering to Eradicate Terrorism and All Threats to Humanity



Robert Steele

OSS.Net, USA

Abstract

Terrorism is in the eye of the beholder and in my view is a tactic, not a movement. Terrorism is common among governments, corporations, and even charities that are used to mislead indigenous peoples so their lands can be looted. In context, terrorism is nothing more than a symptom of the ten high-level threats to humanity, and a clear indicator that information asymmetries and data pathologies have allowed for the complete corruption of services of common concern, enriching the few at the expense of the many. Re-Inventing Intelligence is the fastest way to create infinite stabilizing wealth that banishes terrorism as a tactic.

Biography

Robert Steele was one of the first Central Intelligence Agency (CIA) Case Officers (C/O) assigned to terrorism as a full-time target, in 1983. His operational career includes three tours overseas focused on penetrating extremist and terrorists groups while also supporting a variety of regime change, propaganda, and agent of influence operations; and three tours managing global counterintelligence, denied area production, and advanced information technologies; He was a member of the national-level committees on Foreign Intelligence Priorities and Capabilities, Information Handling, and Future Imagery, and a founding member of the Advanced Processing and Analysis Steering Group. He left CIA in 1988 to serve as the architect and senior civilian for the Marine Corps Intelligence Center, also serving as Study Director of its flagship analytic product, Overview of Planning and Programming Factors for Expeditionary Operations in the Third World, for which he created a new analytic model with 144 factors and 3-5 degrees of difficulty defined to the data element for each. Since 1993 he has been CEO of OSS.Net, Inc. and since 2006 pro bono CEO of Earth Intelligence Network, a 501c3 Public Charity. He has just created Phi Beta Iota, a global honour society open to all, and the Journal of Public Intelligence. Among his many publications are a seminal series on the new craft of intelligence and information operations, and a new series on Collective, Peace, Earth, and Cultural Intelligence. He has earned graduate degrees in international relations and public administration and is a graduate of the Naval War College. Visit him at www.phibetaiota.net.

