

Dr. Waleed A. Alrodhan

(Biographical Sketch)

*Waleed was born in the Kingdom of Saudi Arabia in 1981. He has received his B.Sc. degree in **Computer Sciences** from King Saud University (2002), his M.Sc. degree (**with distinction**) in **Information Security** from Royal Holloway, University of London (2005), and his Ph.D. degree in **Information Security** from Royal Holloway, University of London (2011). Currently, he is an **Information Security Associate Professor** and a member of the university's Scientific Council. Before that, he was the **Dean of the College of Computer and Information Sciences** at Imam Muhammed Ibn Saud University for five years (July 2016 – Sept. 2021), and the **Head of the Cyber Defence Centre** (Sept.2021 – Jan. 2022) at a confidential governmental organisation. His research interests include privacy, identity management, federated identity, single sign-on, and secure web-based protocols.*

Job Career

After receiving his B.Sc. degree in Computer Sciences from King Saud University in 2002, Waleed joined the Saudi Arabian Monetary Agency (SAMA) as a *System Integration Engineer*. In the same year, he joined Al-Elm Information Security Company as an *Information Security Engineer* (for one year). As a part of his job duties at Al-Elm, Waleed was assigned to IRIS Corporation in Malaysia to work as a *Smart-card Application Developer* in 2002.

Waleed has switched to academia in 2003 and joined Imam Muhammed Ibn Saud University as a *Teaching Assistant*. In 2004, he was granted a scholarship from Imam Muhammed Ibn Saud University to pursue his postgraduate studies at the *Information Security Group (ISG)* in Royal Holloway, University of London. He has received a M.Sc. degree (with distinction) in 2005 and a Ph.D. degree in 2010. During his Ph.D. studies, Waleed has worked as an **Academic Supervisor** at Royal Holloway, University of London for the academic year 2009.

In 2011, Waleed was designate as the **Vice Dean for Development and Quality** of the college, the Network Security (CS 432) and the Operating Systems Security (CS 466) courses coordinator, the **Head of the Research Unit**, and the **Chairman of the Research Council**.

In April 2014, he was appointed as a **Vice-Dean of the Deanship of Information Technology** at Imam Muhammed Ibn Saud University (*awarded as the best IT department in the government of the Kingdom of Saudi Arabia by .GOV, in 2015*). Also, he **supervised the university's Security Operation Centre (SOC)** (*ISO27001-accredited for three cycles*) and the founder of the 'Bashiq' Information Security training programme. As a part of his duties in the deanship, Waleed managed and supervised a number of vital and big projects such as the *development of the university's Data Centre*, the *development of the Security Operation Centre*, and the *comprehensive WiFi coverage* (the biggest in the region) projects.

Waleed was the **Dean of the College of Computer and Information Sciences** at Imam Muhammad Ibn Saud University for the period between September 2016 and September 2021.

Under Waleed's deanship, the college of Computer and Information Sciences has been ranked #1 amongst all Saudi Computer Sciences colleges (with regard to its *scientific 'learning outcomes' level*) by the Education and Training Evaluation Commission (ETEC), in 2020.

In addition to his academic responsibilities in the university, Waleed is a **member of the Scientific Committee** of the *Centre of the Information Crimes Studies*, and a **member the Strategic Planning Steering Committee** at Imam Muhammed Ibn Saud University. He has attended many international training courses on strategic planning and academic quality assurance, appeared in many television and radio interviews, and regularly present public seminars.

For a short period after his deanery, Waleed was the **Head of the Cyber Defence Centre** at confidential governmental organisation, and currently, he is an **Information Security Associate Professor** in the Computer Sciences department at the College of Computer and Information Sciences in Imam Muhammed Ibn Saud University.

Finally, Waleed was the **keynote speaker** in a number of international scientific conferences and summer schools, like for example, The International Conference on Cybersecurity (ICSC'2019), The International Conference on Computer Applications & Information Security (ICCAIS' 2018), and CIAG Summer School' 2017.

Research Career

Two of Waleed's research papers (*Addressing privacy issues in CardSpace* and *Improving the Security of CardSpace*) have been chosen to be taught as an integral part of the (CS 590) M.Sc. course on Cloud Systems for Blind and Hearing Impaired, held by **Purdue University**, USA, 2010.

Moreover, many of Waleed's research papers have been used and cited in a number of identity management related reports (e.g. reports by the *Future of Identity in the Information Society (FIDIS) consortium*; funded by the European Union), books (e.g. *The Future of Identity in the Information Society* by Kai Rannenberg), M.Sc. dissertations, Ph.D. theses, and postgraduate courses taught by highly ranked academic institutions (e.g. *IY5601: Application and Business Security Developments*, by the ISG, RHUL).

Waleed is a **member of the editorial board** of a number of international scientific journals like for example: *The International Journal of Cyber Forensics and Advanced Threats Investigations* (UK), and *The Journal of Information Security and Cybercrime Researches* (KSA). Also, he is a senior **reviewer** for a number of well-known journals (e.g. *The Computer Journal*, Oxford Journals, Oxford University, UK and *Security and Communication Networks*, Wiley, USA).

In addition to that, he reviewed many papers for a number of well-known international conferences (e.g. *NordSec* and *EuroPKI*), and books (e.g. *Digital Identity and Access Management: Technologies and Framework* and *Fundamentals of Digital Forensics*).

Finally, in the period between November 2012 and March 2015, Waleed was the P.I. of a governmental funded research project entitled (**Information Privacy in Saudi: Investigation, Assessment, and Solutions**). The project goals have been fully achieved and the project has been successfully refereed with an excellent grade.

- **List of publications:**

- **Books:**

- W. A. Alrodhan, '**Privacy and Practicality of Identity Management Systems: Academic Overview**', VDM Verlag Dr. Müller GmbH, Germany. ISBN 978-3639380255, 2011.

- **Chapters in Books:**

- W. A. Alrodhan, '**Identity Management**', chapter in the '**Digital Identity and Access Management: Technologies and Framework**', IGI Global. State University of New York, NY, USA. ISBN 9781613504987, 2011.
- W. A. Alrodhan, '**Identity Management Systems**', chapter in the '**Digital Identity and Access Management: Technologies and Framework**', IGI Global. State University of New York, NY, USA. ISBN 9781613504987, 2011.

- **Papers in Journals:**

- W. A. Alrodhan and C. J. Mitchell, '**Improving the Security of CardSpace**', EURASIP Journal on Information Security, Volume 2009 (2009), Article ID 167216, 8 pages, oi:10.1155/2009/167216.
- W. A. Alrodhan, '**Enhancing User Privacy in Information Card-Based Identity Management Systems**' (*invited paper*), IJEI: International Journal of Engineering and Industries, Vol. 2, No. 3, pp. 76 - 85, 2011.
- L. A. Alsulaiman and W. A. Alrodhan, '**Information Privacy Status in Saudi Arabia**', The Computer and Information Science Journal, Vol. 7, No. 3, pp. 102, 2014.
- W. A. Alrodhan, '**Towards a Generic Privacy-Preserving System**', The Advances in Information Sciences and Service Sciences (AISS) Journal, Vol. 7, No. 2, pages 9 – 27, 2015.
- W. A. Alrodhan, '**Privacy-Preserving Targeted Mobile Advertising Using Federated Identity Management Systems**', The International Journal of Computer Science and Network Security (IJCSNS), Vol. 17, No. 10, pages 15 – 22, 2017.

- W. A. Alrodhan and Alya I. Alqarni, ‘**Security Investigation and Analysis of OpenID: Problems and Enhancements**’, The International Journal of Computer Science and Network Security (IJCSNS), Vol. 17, No. 10, pages 198 – 211, 2017.
- W. A. Alrodhan and Ali M. Alqarni, ‘**IT Security Controls in Saudi State Universities: A Technical Case Study**’, The International Journal of Computer Science and Network Security (IJCSNS), Vol. 18, No. 3, pages 56 – 73, 2018.
- Noot A. Alissa and Waleed A. Alrodhan, ‘**Self-Sovereign Identity Management: A Comparative Study and Technical Enhancements**’, The International Journal of Computer Science and Network Security (IJCSNS), Vol. 23, No. 12, pages 27 – 80, 2023.

- **Papers in Refereed Conferences:**

- W. A. Alrodhan and C. J. Mitchell, ‘**Addressing privacy issues in CardSpace**’, in: Proceedings of IAS’07, Third International Symposium on Information Assurance and Security, Manchester, UK, August 2007, IEEE Computer Society (2007), pp.285-291.
- W. A. Alrodhan and C. J. Mitchell, ‘**A Client-side CardSpace-Liberty Integration Architecture**’, in: Proceedings of IDTrust’08, the 7th symposium on Identity and trust on the Internet , NIST, Gaithersburg, Maryland, USA, March 2008, ACM International Conference Proceeding Series; Vol. 283 , pages 1-7.
- W. A. Alrodhan and C. J. Mitchell, ‘**A Delegation Framework for Liberty**’, in: Proceedings of the 3rd Conference on Advances in Computer Security and Forensics (ACSF’08), Liverpool John Moores University, Liverpool, UK, 10 - 11 July, 2008; pages 67-73.
- W. A. Alrodhan and C. J. Mitchell, ‘**Enhancing User Authentication in Claim-Based Identity Management**’, in: Proceedings of the 2010 International Symposium on Collaborative Technologies and Systems, CTS 2010, Chicago, Illinois, USA, pages 75-83. IEEE, 2010.
- H. Al-Sinani, W. A. Alrodhan, and C. J. Mitchell, ‘**Liberty-CardSpace Integration for CardSpace Users**’, in: Proceedings

of the ninth symposium on Identity and Trust on the Internet , IDTrust 2010, NIST, Gaithersburg, USA, pages12-25. ACM, 2010.

- W. A. Alrodhan, A. Alturbaq and S. Aldahlawi, '**A Mobile Biometric-Based E-voting Scheme**', in: Proceedings of the 2014 World Symposium on Computer Applications and Research, WSCAR 2014, Sousse, Tunisia. IEEE, 2014.
- W. A. Alrodhan and L. Alsulaiman, '**Information Privacy in Saudi: A Country-Wide Project**', in: Proceedings of the 2014 World Symposium on Computer Applications and Research, WSCAR 2014, Sousse, Tunisia. IEEE, 2014.

- **Other Publications:**

- W. A. Alrodhan, '**Privacy and Practicality of Identity Management Systems**', Technical Report. Department of Mathematics, Royal Holloway University of London. Ph.D. Thesis. RHUL-MA-2010-14, 2010.
 - M. Almeshekah and W. Alrodhan '**Why did Microsoft Passport fail, and how good is the CardSpace solution?**', in: Proceedings of the 4th Saudi International Conference (SIC'10), Manchester, UK, 2010.
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- **Training**

Waleed has attended a big number of job-related and technical training courses and sessions since 2002. The vast majority of these courses were on 'information security' provided by SANS, ISSA, IISP, and other well-known organisations. Other training topics include academic management and quality.

- ***Executive training***

- **Making Innovation Happen**, by **London Business School**. 2016.
- **Building a Proactive, Robust and Resilient Cyber Security Programme**, by **Robert Bigman (former CISO of the CIA)**. 2016.

- **Recognitions & Rewards:**

- An appreciation letter (with a monetary reward) from the *principle of Royal Holloway, University of London*, 2005.
- An appreciation letter (with a monetary reward) from the *Saudi Arabian cultural attaché*, 2006.
- An appreciation letter (with a monetary reward) from the *Saudi Arabian cultural attaché*, 2009.
- An appreciation letter (with a monetary reward) from the *Principle of Imam Muhammed Ibn Saud University* for the outstanding research achievements, 2012.
- Rewarded by the Research Excellence program (International Publishing) at *Imam Muhammed Ibn Saud University*, 2018.
- Rewarded by the Research Excellence program (International Publishing) at *Imam Muhammed Ibn Saud University*, 2019.

- **Certifications, Memberships & Affiliations:**

- Certified Information Systems Security Professional (CISSP), ISC2, USA. Since 2005.
- Associate Member of the Institute of Information Security Professionals (IISP), UK.
- Member of the Information Systems Security Association (ISSA), USA.
- Founding Member of the Saudi Libraries Association, Ministry of Culture, KSA.
- Member of Hemaya Group, KSA.
- Member of the Centre of Excellence in Information Assurance (COEIA), KSA.
- Member of the Saudi Computer Society, KSA.

- **Contacts:**

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