TAN Wee Kek

11 July 2018



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Education

Doctor of Philosophy in Information

Systems

2007 - 2013

Bachelor of Computing in Information

Systems (First Class Honours)

National University of Singapore

National University of Singapore

2004 - 2007

Diploma in Computer Information Systems

with Merit

1998 - 2001

Singapore Polytechnic

Academic Experience

Fellow of the NUS Teaching Academy National University of Singapore

2017 - Present

Senior Lecturer National University of Singapore

2016 - Present

Lecturer National University of Singapore

2013 - 2016

Instructor National University of Singapore

2008 - 2013

Teaching Assistant National University of Singapore

2007 - 2008

Research Interests and Publications

Research Interests

My current primary research interests focus on consumer-based information technology (e.g., online decision aids, social computing, virtual worlds and consumer cloud services). Most of my research is based on design science, a well-established problem-solving paradigm that has been widely adopted in information systems research. I also have expertise in experimental social science.

My current secondary research interests focus on information systems education. I have broadly examined pedagogical issues relating to curriculum design and teaching techniques, including technology enhanced learning.

Research Honours and Awards

2012 Research Achievement Award – School of Computing, National

University of Singapore

2009 ACM SIGMIS (Association for Computing Machinery Special Interest

Group on Management Information Systems) 2009 Magid Igbaria

Outstanding Conference Paper of the Year Nominee

Research Grants

2017 – 2019 Towards Sustainable Research Excellence in Health Informatics – Design

and Implementation of an Internet-of-Thing (IoT) Platform for

Healthcare Analytics

Grant Amount: SGD \$1,100,000 (approximately USD \$780,000)

Type and Source: Faculty Strategic Initiatives, National University of

Singapore

2012 – 2013 Next Generation Cloud Computing-based Electronic Commerce

Platform

Grant Amount: SGD \$48,000 (approximately USD \$40,000)

Type and Source: Academic Research Fund (AcRF) Tier 1, Academic

Research Council, Ministry of Education, Singapore

Grant Number: T1 251RES1117

Refereed Journal Articles

<u>Tan, W. K.</u>, Tan, C. H., and Teo, H. H. "Conveying Information Effectively in a Virtual World: Insights from Synthesized Task Closure and Media Richness," *Journal of the American Society for Information Science and Technology* (63:6), June 2012, pp. 1198-1212.

<u>Tan, W. K.</u>, Tan, C. H., and Teo, H. H. "Consumer-based Decision Aid that Explains Which to Buy: Decision Confirmation or Overconfidence Bias?," *Decision Support Systems* (53:1), April 2012, pp. 127-141.

<u>Tan, W. K.</u>, and Tan, C. H. "Teaching Information Systems Development via Process Variants," *Journal of Information Systems Education* (21:2), Summer 2010, pp. 159-172.

Tan, C. H., <u>Tan, W. K.</u>, and Teo, H. H. "Designing an Information Systems Development Course to Incorporate Agility, Flexibility, and Adaptability," *Communications of the Association for Information Systems* (26), March 2010, Article 10, pp. 171-194.

Refereed Conference Proceedings

<u>Tan, W. K.</u>, Teo, H. H., Tan, C. H., and Yang, Y. "The Social Dimension of Mobile Commerce – Engaging Customers through Group Purchase," in *Lecture Notes in Computer Science, Volume 9751, HCl in Business, Government, and Organizations: eCommerce and Innovation,* Nah, F. F.-H. and Tan, C. H. (Eds), Springer International Publishing, Switzerland, 2016, pp. 468-479. (*Proceedings of the 18th International Conference on Human-Computer Interaction,* Toronto, Canada, July 17-22, 2016)

<u>Tan, W. K.</u>, and Teo, H. H. "Productpedia – A Collaborative Electronic Product Catalog for Ecommerce 3.0," in *Lecture Notes in Computer Science, Volume 9191*, HCl in Business, Nah, F. F.-H. and Tan, C. H. (Eds), Springer International Publishing, Switzerland, 2015, pp. 370-381. (*Proceedings of the 17th International Conference on Human-Computer Interaction*, Los Angeles, California, United States, August 2-7, 2015)

<u>Tan, W. K.</u>, Tan, C. H., and Teo, H. H. "When Two is Better than One - Product Recommendation with Dual Information Processing Strategies," in *Lecture Notes in Computer Science, Volume 8527, HCl in Business*, Nah, F.F.-H. (Ed), Springer International Publishing, Switzerland, 2014, pp. 775-786. (*Proceedings of the 16th International Conference on Human-Computer Interaction*, Creta Maris, Heraklion, Crete, Greece, June 22-27, 2014)

<u>Tan, W. K.</u>, and Teo, H. H. "Impact of Blog Design Features on Blogging Satisfaction: An Impression Management Perspective," in *Lecture Notes in Computer Science, Volume 6778, Online Communities and Social Computing*, Ozok, A. A. and Zaphiris, P. (Eds), Springer Berlin, Heidelberg, 2011, pp.130-139. (*Proceedings of the 14th International Conference on Human-Computer Interaction*, Orlando, Florida, United States, July 9-14, 2011)

<u>Tan, W. K.</u>, Nguyen, T. T. D., Oo Tha, K. K., and Yu, X. "Designing Groupware that Fosters Social Capital Creation: Can Facebook Support Global Virtual Team?," in *Proceedings of the 15th Americas Conference on Information Systems*, San Francisco, California, United States, August 6-9, 2009, Paper 525.

<u>Tan, W. K.</u>, Tan, C. H., and Teo, H. H. "Would I Use My Personal Blog for Commercial Exchange?," in *Proceedings of the 17th European Conference on Information Systems*, Verona, Italy, June 8-10, 2009, 78.

<u>Tan, W. K.</u>, and Teo, H. H. "Blogging to Express Self and Social Identity, Any One?," in *Proceedings of the 17th European Conference on Information Systems*, Verona, Italy, June 8-10, 2009, Paper 42.

<u>Tan, W. K.</u>, and Teo, H. H. "Training Students to be Innovative Information Systems Developers: Synergizing Project-based Learning with Problem-based Learning," in *Proceedings of the 47th ACM SIGMIS Computer Personnel Research Conference*, Limerick, Ireland, May 28-30, 2009, pp. 19-32. [2009 Magid Igbaria Outstanding Conference Paper of the Year Nominee]

<u>Tan, W. K.</u>, Tan, C. H., and Teo, H. H. "Understanding the Exchange Intention of an Individual Blogger," in *IFIP International Federation for Information Processing, Volume 267, Information Technology in the Service Economy: Challenges and Possibilities for the 21st Century,* Barrett, M., Davidson, E., Middleton, C. and DeGross, J. (Eds), Springer, Boston, United States, 2008, pp. 375-378. (*Proceedings of the IFIP Technical Committee 8 Working Group 8.2 International Working Conference*, August 10-13, 2008, Toronto, Ontario, Canada)

Tan, C. H., <u>Tan, W. K.</u>, and Teo, H. H. "Training Students to be Agile Information Systems Developers: A Pedagogical Approach," in *Proceedings of the 46th ACM SIGMIS International Conference on Computer Personnel Research*, Charlottesville, Virginia, United States, April 3-5, 2008, pp. 88-96.

Bibliography and Citations

- Google Scholar Citations http://scholar.google.com/citations?user=ROHLdtUAAAAJ
- Association for Information Systems Electronic Library (AISeL) –
 http://aisel.aisnet.org/cgi/query.cgi?field 1=lname&value 1=Tan&field 2=fname&value
 2=Wee-Kek&advanced=1
- Association for Computing Machinery (ACM) Author Profile Page http://portal.acm.org/author-page.cfm?id=81435597275
- Digital Bibliography & Library Project (DBLP) http://dblp.unitrier.de/pers/hd/t/Tan:Wee=Kek.html

- Scopus https://www.scopus.com/authid/detail.uri?authorId=36482357600
- ORCiD http://orcid.org/0000-0003-4053-1327

Teaching Interests and Experience

Teaching Interests

My current teaching interest focuses on the innovative application of information and communication technologies to create solutions that solve enterprise-level business problems. The courses that I am presently teaching include domains such as enterprise architecture, enterprise information systems development, enterprise data management, enterprise analytics and Internet of Things (IoT). I apply modern software engineering and data analytics principles, and practices in all the courses that I teach to inculcate in students a solid technical foundation in addition to keen business acumen.

I believe that students need to be able to conceptualise creative ideas, design and develop the solution, and bring it to the market to complete the whole cycle, rather than only conceptualising but not following through with execution. Moreover, students must be future-ready at not only responding to disruptive technologies but they should be capable of creating the next disruption.

I have also taught courses in digital commerce and information security management.

Teaching Honours and Awards

AY 2017/18	Inducted as a Fellow of the prestigious NUS Teaching Academy
AY 2012/13	Annual Teaching Excellence Award Honour Roll (University Level)
AY 2011/12	Annual Teaching Excellence Award (University Level)
AY 2010/11	Annual Teaching Excellence Award (University Level) Faculty Teaching Excellence Award Honour Roll Faculty Teaching Excellence Award
AY 2009/10	Annual Teaching Excellence Award (University Level) Faculty Teaching Excellence Award
AY 2008/09	Faculty Teaching Excellence Award
AY 2007/08	Faculty Best Teaching Assistant Award

Teaching/Pedagogy Research Grants

2018-2020	The Fit between Educational Technologies, Learning Model, and Learners' Style – Design and Implementation of an Adaptive Learning Management System Grant Amount: SGD \$520,000 (approximately USD \$380,000) Type and Source: 2/2017 Academic Research Fund (AcRF) Tier 2, Academic Research Council, Ministry of Education, Singapore Grant Number: MOE2017-T2-1-145
2014-2015	Flipped Classroom Mastery Learning Grant Amount: SGD \$400,000 (approximately USD \$290,000) Type and Source: Learning Innovation Fund – Technology (LIFT), National University of Singapore, Singapore Grant Number: LIFT14 C-252-000-116-001

Teaching Experience

Year/Semester	Module	Activity	Rating
2017/18 S2	IS4151 – Pervasive Technology Solutions and	Lecture	4.5/5
	Development	Laboratory	4.6/5
2017/18 S2	IS3106 – Enterprise Systems Interface Design and	Lecture	4.5/5
	Development	Laboratory	4.6/5
2017/18 S2	TBA2101 – Building an Analytics Organisation	Lecture	4.6/5
		Tutorial	4.6/5
2017/18 S1	IS4103 – Information Systems Capstone Project	Lecture	4.8/5
		Recitation	4.9/5
2017/18 S1	IS2103 – Enterprise Systems Server-side Design and	Lecture	4.6/5
	Development	Laboratory	4.5/5
2016/17 S2	IS4150 – Mobile and Ubiquitous Commerce (3 hours seminar format)	Lecture	4.8/5
2016/17 S2	IS3230 – Principles of Information Security (3 hours seminar format)	Lecture	4.5/5
2016/17 S1	IS3102 – Enterprise Systems Development Project	Lecture Recitation	4.67/5 4.49/5

2015/16 S2 & ST1	IS1112X – E-Business Essentials (Flipped Classroom Blended Learning)	Video Lecture and Online Interaction Face-to- Face Interaction	4.400/5 4.400/5
2015/16 S2	IS1112 – E-Business Essentials (Flipped Classroom Blended Learning)	Video Lecture and Online Interaction Face-to- Face Interaction	4.436/5 4.593/5
2015/16 S2	IS2150 – E-Business Design and Implementation (3 hours seminar format)	Lecture	4.697/5
2015/16 \$1	IS3102 – Enterprise Systems Development Project	Lecture Recitation	4.586/5 4.664/5
2014/15 S2 & ST1	IS1112FC – E-Business Essentials (Flipped Classroom Blended Learning)	Video Lecture, Online Interaction and Face- to-Face Interaction	4.800/5
2014/15 S2	IS1112FC – E-Business Essentials (Flipped Classroom Blended Learning)	Video Lecture and Online Interaction Face-to- Face Interaction	4.311/5 4.451/5
2014/15 S1	IS3102 – Enterprise Systems Development Project	Lecture Recitation	4.771/5 4.888/5
2013/14 S2	IS4240 – Business Intelligence Systems (3 hours seminar format)	Lecture	4.735/5
2013/14 S2	IS1112 – E-Business Essentials	Lecture Tutorial	4.656/5 4.692/5
2013/14 S1	IS3102 – Enterprise Systems Development Project	Lecture Recitation	4.776/5 4.822/5

2012/13 S2	IS1112 – E-Business Essentials	Lecture Tutorial	4.604/5 4.681/5
2012/13 S1	IS3102 – Enterprise Systems Development Project	Lecture Recitation	4.704/5 4.719/5
2011/12 S4	GEK1511 – Introduction to Computing	Lecture Tutorial	4.700/5 4.750/5
2011/12 S1	IS3102 – Enterprise Systems Development Project	Lecture Recitation	4.663/5 4.640/5
2010/11 S2	GEK1511 – Introduction to Computing	Lecture Tutorial	4.346/5 4.600/5
2010/11 S1	IS3102 – Enterprise Systems Development Project	Lecture Recitation	4.449/5 4.400/5
2009/10 S2	GEK1511 – Introduction to Computing	Lecture Tutorial	4.208/5 4.380/5
2009/10 S1	CS3214 – Information Systems Development Project	Lecture Recitation	4.364/5 4.500/5
2008/09 S4	GEK1511 – Introduction to Computing	Lecture Tutorial	4.500/5 4.471/5
2008/09 S1	CS3214 – Information Systems Development Project	Lecture	4.354/5
2007/08 S2	CS3214 – Information Systems Development Project	Recitation	4.571/5
2007/08 S1	CS3214 – Information Systems Development Project	Recitation	4.600/5

Internal MSc Theses Examination (in alphabetic order)

2016 Egorova Kristina (MSc)

The Effects of Spatial and Temporal Dispersion on Virtual Teams'

Performance

Workshops	Conducted
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July 2017	Introduction to Programming Workshop	National University of Singapore
July 2016	Introduction to Programming Workshop	National University of Singapore
July 2015	Introduction to Programming Workshop	National University of Singapore

July 2014	Introduction to Programming Workshop	National University of Singapore
July 2013	Introduction to Programming Workshop	National University of Singapore
July 2012	Introduction to Programming Workshop	National University of Singapore
July 2011	Introductory C Programming Workshop	National University of Singapore
Talks Given		
December 2014	A Perfect IS Capstone Experience for HIM and HER	12 th School of Computing Teaching Luncheon, National University of Singapore
June 2012	Outreach Talk: Start Your First Internet Business!	NUS Computing Camp for Malaysian Chinese Independent High Schools 2012, Kuala Lumpur, Malaysia
June 2011	Outreach Talk: The World of Computerized Decision Support (电脑化 的决策支持世界)	NUS Computing Camp for High School Students 2011, National University of Singapore
May 2011	The Case for Java	5 th School of Computing Teaching Luncheon - First Programming Language: The Perspectives, National University of Singapore
June 2010	Outreach Talk: The World of Computerized Decision Support (电脑化 的决策支持世界)	Klang Valley Independent High School Computing Camp 2010 (雪隆八独中电脑工作营),

Professional Activities and Service Leadership

Academic Affiliations

Member of the Association for Information Systems since May, 2008.

Ad-hoc Reviewers for Academic Journals and Conferences

Journals:

Computers & Education Decision Support Systems

Kuala Lumpur, Malaysia

Electronic Commerce Research and Applications IEEE Transactions on Engineering Management Information & Management

Conferences:

ACM SIGMIS Computer Personnel Research Conference - 2009, 2010

Americas Conference on Information Systems - 2009

Australasian Conference on Information Systems - 2013

European Conference on Information Systems – 2009, 2015

Hawaii International Conference on System Sciences – 2009, 2010, 2011, 2012, 2013, 2014, 2015

International Conference on Information Systems – 2009, 2010, 2011, 2012, 2013, 2016

International Conference on Services in Emerging Markets – 2011

Pacific Asia Conference on Information Systems – 2009, 2010, 2011, 2012, 2013, 2014, 2016

Workshop on E-Business - 2011

Academic Conference Organising Committees

Website Coordinator 19th Pacific Asia Conference on Information Systems (PACIS

2015)

2014 - 2015

Technical Committee

Chair

2nd International Conference on Big Data and Analytics in

Healthcare (BDAH 2014)

2013 - 2014

Service to Universit

Member Discretionary Admission and Scholarship Selection Committees

School of Computing, National University of Singapore

2017 - Present

Member Faculty Teaching Excellence Committee (FTEC)

School of Computing, National University of Singapore

2016 - Present

Member Committee for the Revampment of the Bachelor of Computing

(Information Systems) Curriculum

Department of Information Systems and Analytics, School of

Computing, National University of Singapore

2016 - Present

Faculty Advisor NUS Students' Computing Club

School of Computing, National University of Singapore (A Constituent Club of the NUS Students' Union)

2016 - Present

Member School of Computing Term Project Showcase (STePS) Organising

Committee

School of Computing, National University of Singapore

2016 - Present

Lead Faculty Advisor NUS BiZiT Society

School of Computing, National University of Singapore

(A Student Special Interest Group on Business and Information

Technology)

2015 - Present

Coordinator Information Systems Teaching Laboratory

Department of Information Systems and Analytics, School of

Computing, National University of Singapore

2011 - Present

Member Teaching Assistant Selection Committee

Department of Information Systems and Analytics, School of

Computing, National University of Singapore

2013 - 2014

Service to Government

Member Syllabus Development Committee (SDC) for A-Level Computing

Syllabus - H2 Computing

Ministry of Education, Singapore

2015 - 2016

Industry and Consultancy Experience

Co-Founder, Chief Technology Officer and Non-Executive Director Cloudelogy Pte. Ltd. (f.k.a. Cloud Nine Technology Pte. Ltd.)

 Flagship technology Cloud Commerce is a cloud-based Open Application Programming Interface (Open API) platform for creating smart ecommerce applications. These smart ecommerce applications feature comprehensive product catalogue management, single centralized inventory management, and global multi-channel, multi-media and multimode selling. Consumers can conveniently shop on any Cloud Commerce application or shop with a single account.

- Originated from my doctoral research http://scholarbank.nus.edu.sg/handle/10635/47535
- Finalist of the SiTF (Singapore infocomm Technology Federation) Award 2013 under the Cloud Solution category.

2013 - Present

Competition Organising Committees

Member WorldSkills Singapore 2018 (WSS 2018) – ITSSB (IT Software

Solutions for Business)

Technical Working Group – http://www.worldskills.sg

2018

Advisor to Organising

Committee

BiZiT Festival 2017

Organised by NUS BiZiT Society - http://bizitfestival.com

2017

Advisor to Organising

Committee

NUS Data Science Student Challenge 2017 (NUSDSSC 2017)

Organised by NUS Students' Computing Club -

http://www.nus.dsschack.com

2017

Judge

The Singapore Science & Engineering Fair 2017 (SSEF 2017)

2017

Advisor to Organising

Committee

Singapore Geospatial Challenge Business Analytics Mania 2016

(SGCBAM 2016)

Co-organised by National University of Singapore and Singapore

Land Authority - http://www.sgcbam.org

2016

Member WorldSkills Singapore 2016 (WSS 2016) – ITSSB (IT Software

Solutions for Business)

Technical Working Group – http://www.worldskills.sg

2016

Member WorldSkills Singapore 2014 (WSS 2014) – ITSSB (IT Software

Solutions for Business)

Technical Working Group - http://www.worldskills.sg

2014

Professional Courses Attended

July 2016 SAS® Visual Analytics: Fast Track Course

SAS® Singapore

June 2012 Executive Programme in NICF (National Infocomm Competency

Framework) – Service Oriented Architecture

Strategic Technology Management Institute, National University of

Singapore

September 2010 Executive Programme in NICF (National Infocomm Competency

Framework) - Risks and Governance in Software Projects

Strategic Technology Management Institute, National University of

Singapore

National Honours and Awards

2018 Crystal Service Award

WorldSkills Singapore Council (WSSC)

2017 The Commendation Medal (Pingat Kepujian)

National Day Awards 2017

Prime Minister's Office, Singapore

2017 Singapore Armed Forces National Service Medal

Ministry of Defence, Singapore

2011 Singapore Armed Forces Good Service Medal

Ministry of Defence, Singapore

2001 Lee Kuan Yew Award for Mathematics and Science

The Special Academic Awards 2001 Ministry of Education, Singapore

Referees

Available upon request.