Randall E. DURAN

School of Computing and Information Systems
Singapore Management University (SMU)
80 Stamford Road
Singapore 178902

Email: rduran@smu.edu.sg

Summary Statement

Research Interests
• Fintech
• Artificial Intelligence and Machine Learning
• Sustainability
• Risk Management
• Quantum Computing

Teaching Interests
• Financial Analytics
• Financial Markets Processes and Technology
• RiskTech and RegTech
• Corporate & Consumer Financial Technology

Education

Master of Science, Massachusetts Institute of Technology, United States of America, 1992

Bachelor of Science, Massachusetts Institute of Technology, United States of America, 1990

Academic Appointments

Senior Lecturer of Information Systems, School of Computing and Information Systems, SMU, Nov 2020 - Present

Academic Administrative Positions

Coordinator, BSc (IS) Financial Technology Track, School of Computing and Information Systems, SMU, Jul 2024 - Present

Other Positions and Affiliations

Chairman, Catena Technologies, United States of America, Jul 2017 - Apr 2020

Chief Information Officer, 1st Financial Bank USA, United States of America, Apr 2013 - Jun 2017

Chief Executive Officer, Catena Technologies, Singapore, Apr 2002 - Mar 2013

Vice President of Enterprise Solutions, Reuters, Singapore, Jan 2000 - Dec 2002

General Manager - South East Asia, TIBCO Finance Technology, Singapore, Sep 1992 - Dec 2000

Professional Memberships

Member, Singapore Fintech Association, 2022

Member, InfraGard Cyber Finance Working Group, 2018

Member, Financial Services Information Sharing and Analysis Center, 2013 - 2017

Member, American Bankers Association - Cyber and Information Security Working Group, 2013 - 2020

RESEARCH

Research and Project Areas

Fintech
Regtech
Machine Learning
Cryptocurrencies
DLT and Smart Contracts
Cybersecurity

Publications

Journal Articles [Refereed]

Fintech data infrastructure for ESG disclosure compliance, by DURAN, Randall E.; TIERNEY, Peter. (2023). *Journal of Risk and Financial Management, 16* (8), 1-19. https://doi.org/10.3390/jrfm16080378 (Published)

Smart contracts: Will Fintech be the catalyst for the next global financial crisis?, by DURAN, Randall; GRIFFIN Paul R.. (2021). *Journal of Financial Regulation and Compliance, 29* (1), 104-122. https://doi.org/10.1108/JFRC-09-2018-0122 (Published)

A retail bank's BPM experience, by SHANKARARAMAN, Venky; GOTTIPATI, Swapna; DURAN, Randall E.. (2012). *Journal of Information Technology Case and Application Research, 14* (3), 33-45. https://doi.org/10.1080/15228053.2012.10845705 (Published)

A framework for comparing high performance computing technologies, by DURAN, Randall E.; CHEN, Ding; SARASWAT, Rish; HALLMARK, Aaron. (2014). *International Journal of Computational Science and Engineering, 9* (1-2), 119-129. https://doi.org/10.1504/IJCSE.2014.058704 (Published)

Extending CRM with mobile messaging: A case study, by DURAN, Randall E.. (2010). *International Journal of Business Innovation and Research, 4* (1-2), 15-29. https://doi.org/10.1504/IJBIR.2010.029538 (Published)

Books (Refereed)

Regulation of fintech in Asia-Pacific by DURAN, Randall E.; LAWRENCE, Adrian; RAFTERY, Gavin. (2021). Singapore: LexisNexis. (Published)

Financial Services Technology: Processes, Architecture, and Solutions (2nd ed), by DURAN, Randall E.. (2017). Singapore: Cengage Learning Asia. (Published)

Book Chapters

Delivering SMS-based mobile services using SOA, by DURAN; Randall E., DO, Anh Duc. (2012). In ALENCAR, Paulo; COWAN, Donald Cowan (Ed.), *Handbook of research on mobile software engineering: Design, implementation, and emergent applications* (pp. 138-149) IGI Global. (Published)

Business Process Management in Financial Services, by DURAN, Randall E.. (2012). In Venky Shankararaman, J. Leon Zhao, & Jae Kyu Lee (Ed.), *Business enterprise, process, and technology management: Models and applications* Singapore: IGI Global. https://doi.org/10.4018/978-1-4666-0249-6.ch013 (Published)

Applying soft cluster analysis techniques to customer interaction information, by DURAN, Randall E.; ZHANG, Li; HAYHURST, Tom. (2010). In CASILLAS, Jorge; MARTÍNEZ-LÓPEZ, Francisco J. (Ed.), *Marketing intelligent systems using soft computing* (pp. 49-78) Springer. (Published)

Probabilistic Sales Forecasting for Small and Medium-Size Business Operations, by DURAN, Randall E.. (2008). In PRASAD, Bhanu (Ed.), *Soft computing applications in business* (pp. 129-146) Springer. (Published)

Case study: Enterprise integration and process improvement, by DURAN, Randall E.. (2007). In Wing Lam & Venky Shankararaman (Ed.), *Enterprise architecture and integration: Methods, implementation and technologies* IGI Global. https://doi.org/10.4018/978-1-59140-887-1.ch014 (Published)

<u>Conference Proceedings</u>

Enabling GPU acceleration with messaging middleware, by DURAN, Randall E.; ZHANG, Li; HAYHURST, Tom. (2011.0). *Proceedings of the International Conference, ICIEIS 2011, Kuala Lumpur, Malaysia, November 14-16*
, (pp. 410-423) Berlin, Heidelberg: Springer. (Published)

Research Grants

<u>Singapore Management University</u>

Quantum-Enhanced Modelling of Financial Time-Series Data for Rare Event Forecasting, QEP Call for Proposals, Quantum Engineering Programme (QEP) , Co-PI (Project Level): Paul Robert GRIFFIN, Rajesh Krishna BALAN, 2022, S$1,372,272

TEACHING

Courses Taught

<u>Singapore Management University</u>

Undergraduate Programmes :

Enterprise Solution Development

Financial Analytics

Financial Markets Processes and Technology

IS Project Experience (Research)

Postgraduate Professional Programmes :

Corporate and Consumer Financial Technology

Digitalisation in Retail Banking Technology

Digital Transformation in Retail Banking Technology

Financial Markets Systems and Technology

Innovations in Digital Payments

Risktech and Regtech

Other Institutions

C Programming, Masters, U.S. Department of Agriculture Graduate School

Teaching Publications

Cases

Digital transformation at Al Hilal Bank: From bricks and mortar to a fully functional digital bank, by DURAN, Randall E.; POSKITT, Christopher M.; ANG, Jovina. (2024). SMU-24-0020. (Published)

DBS Bank: Championing Change, by Duran, Randall E.; Sproule, Kevin. (2012). SMU-12-0008. (Published)

Teaching Notes

Digital transformation at Al Hilal Bank: From bricks and mortar to a fully functional digital bank, by LAU, Yi Meng; POSKITT, Christopher M.; DURAN, Randall E.; CHEAH, Sin Mei. (2024). SMU-24-0020TN. (Published)

Consultancy

NYU Stern School of Business, Aug 2023 - Present

UNIVERSITY SERVICE

Singapore Management University

Faculty Advisor, Institute of Innovation & Entrepreneurship (IIE) Greenhouse, Jan 2021 - Present

Committee Member, Innovation Grant Evaluation Panel, Dec 2020 - Present

EXTERNAL SERVICE – PROFESSIONAL

Member Board of Advisors, Almond Fintech, 2023 - Present

Member Board of Directors, Paragon Research and Development, 2020 - 2023