

Randall E. DURAN

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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)

Conference Proceedings

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

Singapore Management University

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

Singapore Management University

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

DBS Bank: Championing Change, by Duran, Randall E.; Sproule, Kevin. (2012). SMU-12-0008. (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 Advisors, BCware, 2021 - Present

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