# **STEFANO GRAZIOLI**

University of Virginia - McIntire School of Commerce Rm. 334 Rouss Hall, East Lawn - Charlottesville, VA 22904-4173 grazioli@virginia.edu (434)-982-2973

# EDUCATION AND ACADEMIC APPOINTMENTS

**University of Virginia**, McIntire School of Commerce, 2017 – present Professor of Commerce, General Faculty - Information Technology & Innovation

**University of Virginia**, McIntire School of Commerce, 2011 – 2017 Associate Professor of Commerce, General Faculty - Information Technology

**University of Virginia**, McIntire School of Commerce, 2002 – 2011 Assistant Professor of Commerce - Information Technology

**University of Texas at Austin**, McCombs School of Business, 1997 – 2002 Assistant Professor, Management Sciences and Information Systems

**University of Minnesota**, Carlson School of Management, 1997 Ph.D. in Information and Decision Sciences. Minor in Cognitive Sciences

University of Texas at Austin, McCombs School of Business, 1995 – 1997 Instructor, Management Sciences and Information Systems

**University of Minnesota**, Computer and Information Sciences Department, 1995 MS degree in Computer and Information Sciences

L. Bocconi University, SDA Graduate Business School, 1994 MIS Instructor, International MBA, Winter Quarter, Milano, Italy

**L. Bocconi University**, Milano, Italy, April 1987 Laurea summa cum Laude in Economia & Commercio.

# **RESEARCH INTERESTS**

Management of information technology, Enterprise architecture Digital Innovation, Digital platforms, Blockchain, Artificial Intelligence Deception (fraud) and its detection. Online fraud. Human error.

# PUBLICATIONS

# **TEACHING MATERIALS – BUSINESS CASES**

- Grazioli, S., Nelson, R., CarMax: Building the omnichannel capability, MS MIT teaching materials, 2020
- Grazioli, S., Williamson. J., DIRECTTV: Building a digital platform. MS MIT teaching materials, 2014.

# JOURNALS

Grazioli, S., Jamal, K., Johnson, P. E. A cognitive approach to fraud detection. Journal of Forensic Accounting, 7, 2006, 65-88

Grazioli, S. Where did they go wrong? An analysis of the failure of IT-knowledgeable Internet consumers to detect deception over the Internet. Group Decision and Negotiation, 13(2), 2004, 149-172

Grazioli, S. & Jarvenpaa, S. Deceived! Under target on line. Communications of the ACM, 46(12), 2003, 196-205

Grazioli, S. & Jarvenpaa, S. Consumer and Business Deception on the Internet: Content Analysis of Documentary Evidence. International Journal of Electronic Commerce, 7(4), 2003, 93-118

Johnson, P. E., Grazioli, S., Jamal, K., & Berryman, G. R. Detecting deception: Adversarial problem-solving in a low base rate world. Cognitive Science, 25(3), May/June 2001, 355-392

Grazioli, S. & Jarvenpaa, S. Perils of Internet fraud: an empirical investigation of deception and trust with experienced Internet consumers. IEEE Transactions on Systems, Man, and Cybernetics, 30(4), 2000, 395-410

Johnson, P. E., Grazioli, S. & Jamal, K. Fraud detection: deception and intentionality in cognition. Accounting, Organization and Society, 18(5), 1993, 467-488

P Johnson, P. E., Grazioli, S., Jamal, K. & Zualkernan, I. A. Success and failure in expert reasoning." Organizational Behavior and Human Decision Processes 53(2), 1992, 173-203.

# REFEREED PROCEEDINGS

Chaidarun, N., Tepsuporn, S., Hayes, R., Grazioli, S., Beling, P., & Scherer, W. "Computational Intelligence in Financial Engineering Trading Competition: A System for Project-based Learning." Proceedings of the IEEE Winter Simulation Conference. 2014

Davern M., Grazioli, S. "The Regularity of Irregularities in Financial Statements: A Cognitive Analysis of Information Misrepresentation." American Accounting Association ABO Section, Providence, R.I., 2008

Grazioli, S. & Carrell, R. "Exploding Phones and Dangerous Bananas: Perceived Precision and Believability of Deceptive Messages Found on the Internet." Proceedings of the Americas Conference on Information Systems. Dallas, TX, 2002

Grazioli, S. & Wang, A. "Looking without seeing: Understanding Naïve Consumers' Success and Failure to Detect Internet Deception." Nominated for Best Completed Research Paper Award. Proceedings of the International Conference on Information Systems, New Orleans, LA, 2001, 193-204

Grazioli, S. & Jarvenpaa, S. "Tactics used against consumers as victims of Internet deception." Proceedings of the Americas Conference on Information Systems, Boston, MA, 2001, 810-815

Grazioli, S. "Errors in Detecting Financial Deception: a Cognitive Modeling Approach." Proceedings of the Fourth Conference of the Association for Information Systems, Baltimore, MD, 1998

Grazioli, S. "Facilitating the Detection of Strategically Manipulated Information: A Field Test of Social Contract Theory." Proceedings of the Fourth Conference of the Association for Information Systems, Baltimore, MD, 1998

Grazioli, S., Klein, B. & Goodhue, D. "Errors and Error Recovery in Accessing Organizational Information." Proceedings of the 24th Annual Meeting of the Western Division of the Decision Sciences Institute, San Francisco, CA, 1995

Johnson, P. E., Grazioli, S. & Jamal, K. "Fraud detection: sources of errors in a low base rate world." 10th European Conference on Artificial Intelligence (ECAI), Proceedings of the Research Workshop on Expert Judgment, Human Error, and Intelligent Systems, Vienna, Austria, 1992.

# **BOOK CHAPTERS**

Grazioli, S., Smith, K. & Johnson, P. E. "Managing risk in social exchange" in K. Smith, J. Shanteau and P. Johnson (Eds.) Psychological explorations of competence in decision-making. Cambridge University Press, 2004, 71-123

Jarvenpaa, S. & Grazioli, S. "Surfing Among Sharks: how to gain trust in cyberspace." Financial Times 7/12. Reprinted in Marchand, D. A., Davenport, T. H., and Dickson T. (Eds.) FT, Mastering Information Management Series, Prentice-Hall, London, 1999, 197-201

Grazioli, S. & Klein, B. "Errors in Information Systems." in G. B. Davis (Ed.) Blackwell Encyclopedia of Management, Blackwell Publishing, 1996.

# PRESENTATIONS

- 2022 Center for the Management of Information Technology, University of Virginia. "Wow! But... The elusive business value of ChatGPT"
- 2022 Center for the Management of Information Technology, University of Virginia. "Unlocking the Metaverse"
- 2019 Center for the Management of Information Technology, University of Virginia. "Robotic Process Automation"
- 2018 Center for the Management of Information Technology, University of Virginia. "Blockchain: beyond the hype" with Dan Elron
- 2017 Center for the Management of Information Technology, University of Virginia. "Sprint: Google does Design thinking," with R. Nelson
- 2016 Center for the Management of Information Technology, University of Virginia. "Artificial intelligence in the enterprise," with J. Li
- 2015 Center for the Management of Information Technology, University of Virginia. "Emerging Technologies: The Internet of Things"

2014	Center for the Management of Information Technology, University of Virginia. "Bitcoin & the Disruptive Potential of Cryptocurrency"
2013	Center for the Management of Information Technology, University of Virginia. "Architecture, Innovation & Emerging Technologies"
2013	MIS Academic Leadership Conference, Kelly School of Business, University of Indiana. "The relationship between academia and industry"
2009	CMIT, Reston VA, "Business misrepresentations: research for practice"
2008	SAIC, Washington D.C., "Picking IT trends strategically"
2008	American Accounting Association, ABO Section, Providence, R.I. "The Regularity Of Irregularities In Financial Statements: A Cognitive Analysis Of Information Misrepresentation.", with M. Davern
2004	Universita' Bocconi, Milano, Italy. "Enterprise Architectures with the Zachman Framework"
2002	NYU, New York. "Deception on the Internet: An Integrative Study" (presentation via videoconference)
2002	CORE AIS-SIG, Barcelona, Spain, "Beyond Task/Technology Fit: How Information Technology Affects Performance by Transforming the Task." With D. Goodhue and B. Klein
2001	INSEAD, Fontainebleau, France. "Page jacking: Success and failure at detecting Internet fraud"
2001	Universita' Bocconi, Milano, Italy. "Looking without seeing: how Internet consumers succeed and fail at detecting fraud"
2000	Informs, San Antonio TX. "Internet deception: building a research database" with S. Jarvenpaa
1998	TILAR '98. Austin, TX. "Detecting manipulations of financial information," and "Managing financial Information"
1997	Informs, Dallas, TX. "Application of a method to compute measures of interrater reliability when the behavior of interest is infrequent", with L. Seligman
1996	TEXIS, Arlington, TX. "Job hunting and publishing strategies." Invited panelist
1995	Fourth Carlson School of Management Interdisciplinary Conference, Minneapolis, MN. "Opportunity and Intentionality in the Misrepresentation of Information", with M. Davern and P. E. Johnson
1994	Scuola di Direzione Aziendale at Bocconi University, Milano, Italy. "The production and reproduction of specialized knowledge: the case of semiconductor manufacturing," with P. E. Johnson and I. A. Zualkernan
1993	TIMS/ORSA National Conference, Phoenix, AZ. "Qualitative modeling of adversarial worlds: the case of fraud detection"

1993	Second Carlson School of Management Interdisciplinary Conference, Minneapolis, MN. "Auditor success: individual and organizational variables," with P. E. Johnson, A. Das, G. Berryman and K. Jamal
1992	First Carlson School of Management Interdisciplinary Conference, Minneapolis, MN. "Financial statements fraud detection: success and failure in a low base rate world," with P. E. Johnson and K. Jamal
1992	Operation and Management Science Department Colloquium, Carlson School of Management, University of Minnesota. "Design of knowledge roles in semiconductor manufacturing," with P. E. Johnson and I. A. Zualkernan. Also Accounting Department Colloquium
1991	Carnegie Conference on Decision Making, Cognitive Science and Accounting, Pittsburgh, PA. "Fraud detection: deception and intentionality in cognition," with P. E. Johnson and K. Jamal
1991	University of Southern California IV Symposium on Expert Systems in Management, Finance, and Accounting, Pasadena, CA. "Creating financial deceptions," with P. E. Johnson
1989	University of Southern California, III Symposium on Expert Systems in Management, Finance, and Accounting, Los Angeles, CA. "Knowledge required to detect financial statements fraud," with P. E. Johnson and K. Jamal
1988	"Expert systems as intelligent decision support systems in economics", seminar series on Expert Systems. C.I.L.E.A. Executive education series, Milano, Italy.

# TEACHING

At the *University of Virginia* (UVA) I teach courses on a wide range of IT topics to many diverse audiences.

## Graduate programs:

Master's program in the Management of Information Technology (MSMIT), an exec-ed format program. Its students are mid-career IT and business managers with an average of 13 years of work experience.

MS in Commerce program, a pre-experience Master's program for non-business majors

MS in Accounting program, a pre-experience Master's program for accounting majors

MS in Business Analytics program (MSBA), a joint venture between McIntire and the Darden Graduate School of Business that is designed for professionals interested in sharpening their analytics skills.

My teaching at the *University of Texas* focused on graduate-level classes. I taught all sections of the popular and well-received "Managing Information" class (120 MBAs / year). The class was a cornerstone of the Information Management MBA specialization at the McCombs School of Business.

# Exec ed:

I taught exec-ed courses on managing IT resources at McIntire and a couple of joint ventures between McIntire, the Darden School of Business, and the Data Science School at UVA.

# Undergraduate:

My undergraduate teaching has covered emerging technologies, digital innovation, financial engineering, databases, coding, and project practica.

# Global:

I teach UVA courses in Argentina, both at the graduate and undergraduate levels.

I taught MIS topics in the Master's Program of my alma mater, *Bocconi University in Milano* (large class, international audience).

My teaching evaluations are consistently above the average of comparable courses, and average over 4.8 on a 5-point scale.

# COURSES TAUGHT

SQL and Database management systems (UVA, grad) Spring 2024 Enterprise Architecture (UVA, grad) 2003-2023 *Digital Trasformation* (UVA grad) 2021-2023 Financial Trading Analytics (UVA, grad) Spring 2023 (two sections/year) International IT projects (UVA, grad) Fall 2022-2023 Database management systems and business intelligence (UVA, undergrad) Fall 2021-2023 Information Technology in Finance (UVA, undergrad & grad sections) Spring & Fall 2010-2023 (one-two sections/year) Financial Information Management (UVA, grad) Spring 2009-2022 Enterprise IT Management (UVA grad) 2005-2020 Digital Innovation (UVA, undergrad) Spring 2014-20 & Jan term 2021 International IT Project Retrospectives (UVA, grad) Fall 2013-14 and 16-19 IT Project Practicum - UVA in Argentina (UVA, undergrad) Summer 2013, Jan Term 2014-23

Financial System Engineering (UVA, undergrad & grad sections) Spring & Fall 2006-2009 (one-two sections/year)
Business Software Development (UVA, grad) Spring 2003 (2 sec), 2004 (2 sections/year)
Managing Information (UT MBA) Spring 2002 (2 sections/year)
Managing Financial Information (UT MBA) Spring 2002
IT Applications in Finance (UT MBA) Spring 1996
Management of Information Systems (UT MBA) Spring 1994

# **EXECUTIVE EDUCATION**

- 2020-21 Exec. Ed. program instructor. Foundations of Data Science for Business Leaders. *Building the Data Pipeline*. Darden, McIntire & Data Science School joint program
- 2009-13 Exec. Ed. program instructor. Bank of America Program. *Enterprise Architecture as Strategy*. One-two programs/year, 40 participants each
- 2002 Exec. Ed. program instructor. *I.T. architectures* seminar. Virginia Housing Development Authority

# OTHER TEACHING EXPERIENCE

- 1995 Teaching Opportunity Program for Doctoral Students. TOPSD is a teachertraining program sponsored by the Bush foundation
- 1991 Teaching Assistant, Expert Systems (undergraduate and MBA). University of MN
- 1987 Teaching Assistant, Introduction to microcomputer operating systems and statistics application packages (SPSS). "Universita' degli Studi" at Milano, Italy.

# **PROFESSIONAL EXPERIENCE**

### Consultant, 1999

Detection of fraud in Electronic Benefits Transfer systems. Intelligent Technologies Corporation and the State of Texas

#### Consultant, 1997

Potential of sophisticated human-computer interfaces in the health care industry. Carnegie Group, Inc

Consultant, 1997

Market survey for specific categories of online financial data. Carnegie Group, Inc

Director of the Board, U. of MN. Federal Credit Union, 1994-1995

Responsibilities included: policy formulation (including lending policies), and planning

Military Service, 1987-1988

Responsibilities included computer training for new recruits and statistical analysis of demographic data

System Analyst, Unisys Corporation, Milano, Italy, 1986-1988 Design and development of Decision Support and Executive Information Systems

Coordinator, seminar series on Expert Systems C.I.L.E.A. Executive education series, Milano, Italy, 1987

# AWARDS, SCHOLARSHIPS, FELLOWSHIPS, AND GRANTS

2023	Inaugural McIntire's Teaching Fellow
2022	Jefferson Scholars Foundation's Award for Excellence in Teaching. (\$5,000)
2018	University of Virginia Order of Cloak and Dagger - 12 <sup>th</sup> Annual faculty award (\$1,212)
2009	University of Virginia All-University Teaching award. The award recognizes teaching excellence at the University level (\$ 2,000)
2007	Wachovia Corporation sponsored the Hedge Tournament (\$2,100)
2003-07	Summer research support. McIntire School of Commerce at the University of Virginia (\$22,000/year)
2003	"The present and future of Internet-based customer service: A comparative analysis of organizational experiences" Research contract financed by the U.S. Internal Revenue Service – (extension, \$5,500). The grant sponsored a research project focused on knowledge management at the IRS, focused on the creation of new email-based functionality to deliver better support to taxpayers. Phase III
2002	"Effects of Data Integration on Business Information Retrieval" IBM Research Grant (\$3,000). The grant partially sponsored the analysis and write-up of a research project designed to better understand how novice business information seekers retrieve information from organizational databases
2002	"The present and future of Internet-based customer service: A comparative analysis of organizational experiences" Research contract financed by the U.S. Internal Revenue Service (\$16,500). Phase III

### Stefano Grazioli

2001	"Using Task-Technology Fit Theory to understand the impacts of alternative human-interface technologies on the retrieval of integrated and non- integrated organizational data." University of Texas Faculty Research Committee proposal-based research support (\$12,500)
2001	"Internet-based customer service. Phase II: Survey" Research contract financed by the U.S. Internal Revenue Service (\$13,700)
2001	MSIS department nominee for the school-wide Trammel/CBA Foundation Teaching Award (UT)
2000-01	"Managing Information" has been voted the most sought-after IT elective by the MBA students (UT)
2000	"Internet-based customer service. Phase II: Field Interviews" Research contract financed by the U.S. Internal Revenue Service. (\$10,600, matched by UT/OSP funding)
2000	"IBM/DB2 Database administration" Sponsored seminar. IBM provided hardware, software, and instructor support
1999	"Outstanding instructor in an elective course," runner-up. Graduate Business Council Award (UT)
1999	"Internet-based customer service: a business analysis." Research contract financed by the U.S. Internal Revenue Service (\$4,096, matched by UT/OSP funding). This multi-year grant sponsored a research project focused on knowledge management at the IRS, focused on the creation of new email- based functionality to deliver better support to taxpayers
1999	'Internet consumer deception' University of Texas Center for Consumer Insight Grant (with Prof. Sirkka Jarvenpaa - \$1,400). The grant supported the creation of a database of cases of Internet fraud
1999	'Engines for Innovation in Education' grant (see below). Extension for a value of \$300,000
1998	MSIS department nominee for the school-wide CBA Foundation Advisory Council Award for Teaching Innovation (UT)
1998	Microstrategy, Inc. grant. The grant included a donation of sophisticated software for data analysis and warehousing, training material, and technical support, for \$250,000. The grant was designed to support a Business Intelligence class for MBAs
1998	'Engines for Innovation in Education' grant (see below). Extension for a value of \$91,000
1997	'Engines for Innovation in Education' grant (see below). Extension for a value of \$230,000

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### Stefano Grazioli

- 1996 'Engines for Innovation in Education' grant by Informix Software, Inc. (now IBM). This multi-year grant included a donation of advanced database software, training material, and technical support for a value of \$100,000. The purpose of the grant was to teach graduate students the development of financial applications using sophisticated, professional-grade tools, as well as to create a technological environment for research on decision-making in financial domains
- 1995 Carlson School of Management. Thesis cost award (\$1,500)
- 1994 Carlson School of Management Dissertation Fellowship. Full stipend (\$15,000) plus full tuition waiver to support dissertation research
- 1989-93 University of Minnesota Graduate School Fellowship (total \$8,000)
- 1991 NATO Advanced Study Institute Travel Grant (approx. \$3,000)
- 1990 Colonial Dames National Society Academic Scholarship (approx. \$7,000)
- 1989 Vinciguerra Fund Grant (\$1,000)
- 1988 Fulbright Scholarship (\$3,000 + full tuition coverage)
- 1988 Vinciguerra Grant (\$3,500)

## SERVICE AND ADMINISTRATION

- 2008-23 *Academic Director*, Master of Science in the Management of Information Technology, University of Virginia
- 2008-23 *Module 1 (Enterprise architecture) coordinator*, Master of Science in the Management of Information Technology, University of Virginia
- 2015-23 *Module 0 (Orientation) coordinator,* Master of Science in the Management of Information Technology, University of Virginia
- 2012-23 Graduate Policy Committee, McIntire
- 2005-23 Graduate Admissions Committee, McIntire
- 2021 *Committee member* IT function administrative unit review, McIntire School of Commerce
- 2009-14 University of Virginia Teaching Awards Committee
- 2009-13 *Faculty Lead*, Bank of America Executive Education Program in cooperation with the Darden School of Business, University of Virginia
- 2009-13 Technology Advisory Committee, McIntire
- 2002-13 *Residency coordinator*. Master of Science in Management of Information Technology, University of Virginia. Coordinated a 'full-immersion' two-week residency focusing on Enterprise and IT architectures

- 2010-11 University of Virginia academic symposium on the use of evidence in improving teaching in higher education. Organizing committee
- 2010 Alumni Webinar "Google's Lessons in Innovation"
- 2006-07 Research Committee, McIntire
- 2005-06 *Academic Director*, Master of Science in Management of Information Technology, University of Virginia
- 2005-06 *Module 4 (IT strategy) coordinator*, Master of Science in the Management of Information Technology, University of Virginia
- 2003-05 Research Committee, McIntire
- 2003-04 Committee for the new Institute on Integrity and Wisdom in Commerce, McIntire
- 2004 Ad hoc Promotion and reappointment Committee (general faculty), McIntire
- 2003 Committee for the redesign of the Quantitative Analysis curriculum at McIntire
- 2002 Ph.D. committee co-chair (with D. Schkade, UT). Ph.D. committee member
- 1997 *International MBA advisor*, for the Rotterdam School of Management, The Netherlands
- 2002-03 Member of the faculty hiring committee for the MIT area McIntire
- 1996-01 Information Management Program steering committee UT Austin
- 1999-00 Extended Budget Council of the MSIS department UT Austin
- 1996-00 Member of the hiring committee for new faculty UT Austin
- 1999 Designed and delivered the "Information Integration Lab" a series of technical IT labs that focus on integrating business information across platforms and technologies - UT Austin
- 1998 Redesigned, coordinated, and delivered 'Managing Information' as the first class of a sequence of three courses that constitute the core of the MBA specialization in Information Management at UT Austin
- 1998 Reviewer for the Undergraduate Research Fellowships UT Austin
- 1997 Judge in the Information Management Association Challenge

## SERVICE TO THE PROFESSION

Ad hoc reviewer for Information System Research, Organization Science, MIS Quarterly, Management Science, Academy of Management Review, IEEE, Journal of MIS, International Journal of Electronic Commerce, ICIS Proceedings, European Journal of Information Systems, Journal of Information Technology Management, Decision Support Systems, Database, AMCIS, CORE-ICIS, Electronic Commerce Research Journal

### Stefano Grazioli

- 2003 Served as a *research mentor* for the Cognitive Research in Information System Special Interest Group. CORE SIG is one of the SIG associated with the International Conference for Information Systems, the leading conference for IS academics
- 1996-00 Member of the Program Committee of the *Managerial and Organizational Cognition Interest Group (MOCIG)* of the Academy of Management

I love my twenty-one-year-old daughter Francesca, my wife Alyssa, and Italian cooking. I am painfully trying to resume my distance running (I ran my seventh Marathon in 2010 – that is a very long time ago), and I play squash really poorly, but having much fun doing it.