

Sanjukta Das Smith

CONTACT	The State University of New York at Buffalo Department of Management Science and Systems 325C Jacobs Management Center Buffalo, NY 14260 Phone: 716-645-3254 Email: sdsmith4@buffalo.edu	
EDUCATION	Ph.D. Operations and Information Management University of Connecticut , Storrs, CT	August 2007
	M.S. Management Systems Clarkson University , Potsdam, NY	August 2001
	M.B.M. Business Management (Human Resources) Calcutta University , Calcutta, India	July 2000
	B.Com. Commerce (Accounting) <i>Sivanath Sastri College</i> Calcutta University , Calcutta, India	July 1998
RESEARCH INTERESTS	Design and economics of fault-tolerant virtualized server systems Economics of cloud computing Health information systems and technologies, such as healthcare social networks Economics of digital media and online communities Privacy in the digital space	
EMPLOYMENT	Associate Professor Management Science and Systems (MSS) School of Management State University of New York at Buffalo	September 2013 – Present
	Assistant Professor Management Science and Systems (MSS) School of Management State University of New York at Buffalo	August 2007 – August 2013
	Instructor Management Information Systems (MIS) School of Business Clarkson University , Potsdam, NY	August 2001 – May 2002

APPOINTMENTS	<p>Department Chair Management Science and Systems (MSS) School of Management State University of New York at Buffalo</p> <p>Co-Associate Director of the Computational Data Enabled Science and Engineering (CDSE) Program State University of New York at Buffalo</p> <p>Associate Faculty Computational Data Enabled Science and Engineering (CDSE) State University of New York at Buffalo</p> <p>Director of MS MIS Program Management Science and Systems (MSS) School of Management State University of New York at Buffalo</p> <p>Associate Director of MS MIS Program Management Science and Systems (MSS) School of Management State University of New York at Buffalo</p>	<p>August 2018 – Present</p> <p>October 2016 – Present</p> <p>July 2016 – Present</p> <p>July 2016 – August 2020</p> <p>January 2010 – June 2016</p>
GRANTS	<p>Co-Principal Investigator “Providing Reliable Cloud Services Through Availability-aware SLA Contract Designs”. December 2015 – 2016. Huawei Technologies</p> <p>Collaborator with the UB Department of Mathematics in the NSF EDT: Enriched Doctoral Training in the Mathematical Sciences Program. Coordinated the partnership with the Department of Management Science and Systems. November 2015.</p> <p>Co-Principal Investigator “An Analytical Approach to Quantifying Availability (AQUA) for Cloud Resource Provisioning and Allocation”. August 2014 – 2017. National Science Foundation (NSF), CSR Medium Collaborative Research Award # 1409809</p> <p>Actively supporting faculty in the proposal, “Computational and Data-Enabled Science and Engineering (CDSE)” that has been awarded funding after competitive reviews by the NY SUNY 2020 3E Fund, University at Buffalo. This funding is for the creation of a research</p>	<p>\$225,000</p> <p>\$600,000</p> <p>\$400,000</p>

center and new Masters and doctoral programs in CDSE jointly among the schools of engineering, management, arts and sciences, and pharmacy and pharmaceutical sciences. February 2013.

Co-Principal Investigator

“Disaster Resilience and Availability Prediction (DRAP) for Clouds”. **\$102,000**
November 2011.

Google Research Awards, Award # 2011_R2_549

AWARDS AND
HONORS

Dean’s Faculty Fellow. 2016 – 2022.

UB’s Exceptional Scholar – Young Investigator Award. 2012. **\$7500**

Dean’s Research Fellowship Award. 2010. **\$21,000**

UB School of Management Summer Grants Awards. 2010 – 2012.

Baldy Center Small Grants Award. 2008. **\$1,000**

UB School of Management Small Grants Program Awards. 2007 –
2012. **\$8,000**

Student Fellow, Hall of Fame. University of Connecticut, School of
Business. Inducted 2007.

Winner, Doctoral Dissertation Fellowship Competition. University
of Connecticut. 2006.

Predocctoral Fellowship. University of Connecticut. 2005.

Summer Fellowships. Graduate School and School of Business.
University of Connecticut. 2004 – 2006.

Outstanding Scholars Program Fellowship Award. Graduate
School, University of Connecticut. 2002 – 2005.

Member, Beta Gamma Sigma. Honor Society of the AACSB.
Initiated 2001.

EDITORSHIPS

Associate Editor, *International Conference on Information Systems (ICIS) 2018, San Francisco, CA.*

Associate Editor, *Information Systems Research.* January 2016 – 2020.

Associate Editor, *INFORMS Journal on Computing.* December 2013 – March
2017. Papers with decisions: **15**.

Guest Associate Editor, *MIS Quarterly.* August 2012 – 2014. Papers with decisions:
1.

Associate Editor, *International Conference on Information Systems (ICIS) 2013, Milan, Italy.* Papers with decisions: **3**.

Coordinating Editor, *Information Systems Frontiers.* January 2008 – Present.

Papers with decisions: **22**.

Editorial Board Member, *Journal of Management Information Systems*. Special Issue on *Information Systems in Services*. Fall 2008. Papers with decisions: **1**.

Editorial Board Member, *International Journal on Electronic Commerce*. Special Issue on *Service Science in E-Commerce*. Fall 2008. Papers with decisions: **1**.

REFEREED
JOURNAL
ARTICLES

Fan, J., Jiang, M., Rottenstreich, O., Zhao, Y., Guan, T., Das, S., Ramesh, R. and Qiao, C., “A Framework for Provisioning Availability of NFV in Data Center Networks,” *IEEE Journal on Selected Areas in Communications – 2018, Special Issue on Network Softwarization & Enablers*.

Yuan, S., Das, S., Ramesh, R. and Qiao, C., “Analysis of the Cloud Contract Trifecta: Backup Resources, Price and Penalty in the Availability-Aware Cloud,” *Information Systems Research*, December 2018, **29**(4).

Du, A.Y., Das, S., Yang, Z., Qiao, C. and Ramesh, R., “Predicting Transient Downtime in Virtual Server Systems: An Efficient Sample Path Randomization Approach,” *IEEE Transactions on Computers*, December 2015, **64**(12).

Yang, Z., Liu, L., Das, S., Ramesh, R., Du, A.Y. and Qiao, C., “Availability-aware Energy-efficient Virtual Machine Placement Algorithms,” *Journal of Communications – Special Issue on “Frontiers of Computing and Communications”*, September 2015, **10**(9).

Du, A.Y., Das, S., Gopal, R. D. and Ramesh, R., “Optimal Management of Digital Content on Tiered Infrastructure Platforms,” *Information Systems Research*, December 2014, **25**(4), pp. 730 – 746.

Du, A.Y., Das, S. and Ramesh, R., “Efficient Risk Hedging by Dynamic Forward Pricing: A Study in Cloud Computing,” *INFORMS Journal on Computing*, Fall 2013, **25**(4).

Chai, S., Das, S. and Rao, H.R., “Factors Affecting Bloggers’ Knowledge Sharing on Social Networking Websites: A Socio-Technical Approach,” *Journal of Management Information Systems*, Winter 2011 – 2012, **28**(3), pp. 309-341. Citations as of 6/24/2015: **91**.

Das, S., Du, A.Y., Gopal, R. and Ramesh, R., “Risk Management and Optimal Pricing in Online Storage Grids,” *Information Systems Research*, December 2011, **22**(4), pp. 756-773. Citations as of 6/24/2015: **13**.

Bapna, R., Das, S., Day, R., Garfinkel, R. and Stallaert, J., “A Clock-and-Offer Auction Market for Grid Resource when Bidders Face Stochastic Computational Needs,” *INFORMS Journal on Computing*, Fall 2011, **23**(4), pp. 630-647. Citations as of 6/24/2015: **13**.

Du, A.Y., Das, S., Gopal, R. D. and Ramesh, R., “Risk Hedging in Storage Grid Markets: Do Options Add Value to Forwards?” *ACM Transactions on Management Information Systems*, June 2011, 2(2).

Bapna, R., Das, S., Garfinkel, R. and Stallaert, J., “A Market Design for Grid Computing,” *INFORMS Journal on Computing*, Winter 2008, 20(1), pp. 100 – 111. Citations as of 6/24/2015: **73**.

Das, S., “Timing Movie Release on the Internet in the Context of Piracy,” *Journal of Organizational Computing and Electronic Commerce*, October – December 2008, 18(4), pp. 307 – 332. Citations as of 6/24/2015: **13**.

MANUSCRIPTS
UNDER REVIEW

Venkatesan, S., Han, W., Das, S. and Sharman, R., “Seeking Advice from Similar Patients: The Role of Cohesive Subgroups and Discourse Dynamics toward Quality of Response”, under second review at *Information Systems Research*.

Kisekka, V., Sharman, R., Das, S., Gerber, N. and Lynch, J., “A Study of Individual Resilience Against Information Technology Extreme Events in Healthcare Organizations,” under revision for second review at *Journal of the Association for Information Systems*.

EDITED BOOKS

Gupta, M., Das Smith, S., and Sharman, R., (Eds.) “Digital Identity and Access Management: Technologies and Frameworks”. IGI Publishers, 2011.

WORK IN
PROGRESS

Jiang, M. and Smith, S., “Availability-aware Optimal Resource Allocation and Provisioning in Network Function Virtualization”, Target Journal: *Production and Operations Management*. Target submission date: December 2020.

Howell, P., Sharman, R. and Das, S., “The Impact of Message Framing on the Adoption of Smart Cards in High-Risk, Vulnerable Patient Populations”, Target Journal: *Information Systems Research*.

“Planned Interventions: Resource Management in the Availability-aware Cloud”, with Shuai Yuan and Ram Ramesh. Target Journal: *INFORMS Journal on Computing*.

Du, A.Y., Das, S., Yang, Z., Qiao, C. and Ramesh, R., “Predicting Transient Downtime in Datacenters Considering Their Hierarchical Multi-Domain Architectures”. Target Journal: *IEEE Transactions on Systems, Man, and Cybernetics: Systems*.

“A Cost Based Implementation Model for Single Sign-On Security Systems” with Raj Sharman and Manish Gupta.

REFEREED
CONFERENCE

Qu, J., Jiang, M., Sharman, R., Das, S., Howell, P. and Fox, C., “Incentive, behavior, and outcomes: a review of healthcare payment model” 2019 Decision Sciences Institute Annual Conference, New Orleans, Louisiana, November, 2019.

PROCEEDINGS

Qu, J., Jiang, M., Sharman, R., Das, S., Howell, P., Fox, C., “A Multilevel Cost-saving Modeling of Accountable Care Organizations”, INFORMS, Annual Conference, Seattle, Washington, October, 2019.

Ivanov, A., Das, S., Sharman, R., “Using Twitter to Predict County-Level Cancer Mortality: Five Stages of Grief Framework”, 24th Americas Conference on Information Systems (AMCIS), New Orleans, Louisiana, August 2018.

Venkatesan, S., Han, W., Sharman, R. and Das, S., “Bi-modal Network Relationships in Online Health Networks”, 24th Americas Conference on Information Systems (AMCIS 2018), New Orleans, LA.

Jiang, M., Das, S. and Qiao, C., “Availability-Aware Optimal Resource Allocation and Provisioning in Network Function Virtualization”, Workshop on Information Technologies and Systems (WITS 2017), Seoul, South Korea.

Jiang, M., Das, S. and Qiao, C., “Availability-Aware Optimal Resource Allocation and Provisioning in Network Function Virtualization”, Conference on Information Systems and Technology (CIST 2017), Houston, TX.

Venkatesan, S., Han, W., Sharman, R. and Das, S., “Quality of Information in Health Networks: Seeking Advice from Similar Patients”, Workshop on Information Technologies and Systems (WITS 2016), Dublin, Ireland.

Howell, P., Abdelhamid, M., Sharman, R. and Das, S., “Smart Card Adoption in Healthcare: An Experimental Survey Design using Message Framing”, Workshop on Health IT and Economics (WHITE 2016), Washington DC.

Howell, P., Abdelhamid, M., Sharman, R. and Das, S., “Smart Card Adoption in Healthcare: An Experimental Survey Design using Message Framing”, International Conference on Information Systems (ICIS 2016), Dublin, Ireland.

Howell, P., Sharman, R. and Das, S., “Patient Adoption of Smart Cards”, 22nd Americas Conference on Information Systems (AMCIS 2016), San Diego, CA.

Yuan, S., Das, S., Ramesh, R. and Qiao, C., “Resource Adjustment and Intervention Scheduling in the Availability-Aware Cloud”, Workshop on Information Technologies and Systems (WITS 2015), Dallas, TX.

Du, A. Y., Das, S., Qiao, C., Ramesh, R. and Yang, Z., “Hierarchical Multi-Domain Architecture in Cloud Datacenters: Predicting Transient Downtime of Client Services”, Conference on Information Systems and Technology (CIST 2015), Philadelphia, PA.

Yang, Z., Liu, L., Qiao, C., Das, S., Ramesh, R. and Du, A.Y., “Availability-aware Energy-efficient Virtual Machine Placement”, IEEE ICC 2015 - Communications QoS, Reliability and Modeling Symposium (ICC '15 CQRM), London, UK.

Yuan, S., Das, S., Ramesh, R. and Qiao, C., “Resource Allocation and Run-Time Intervention Scheduling in the Availability-Aware Cloud”, Workshop on Information

Technologies and Systems (*WITS 2014*), Auckland, New Zealand.

Ramamoorthy, S. S., Das, S., Ramesh, R. and Annamalai, S., “Intelligent Resource Allocation for Server Virtualization Using Ant Colony Optimization”, Workshop on Information Technologies and Systems (*WITS 2014*), Auckland, New Zealand.

Yuan, S., Das, S., Ramesh, R. and Qiao, C., “Availability-aware Resource Provisioning, Pricing, and Allocation Adjustment in the Cloud”, Conference on Information Systems and Technology (*CIST 2014*), San Francisco, CA.

Yuan, S., Das, S., Du, A.Y., Ramesh, R. and Qiao, C., “Cloud Resource Provisioning and Contract Adjustment in the Backdrop of SLA Violation Risk Mitigation”, Conference on Information Systems and Technology (*CIST 2013*), Minneapolis, MN.

Du, A. Y., Das, S., Qiao, C., Ramesh, R. and Yang, Z., “Downtime Predictions for Virtual Servers: A Study Under Two Checkpointing Scenarios”, Conference on Information Systems and Technology (*CIST 2012*), Phoenix, AZ.

Du, A. Y., Das, S., Hu, J., Qiao, C., Ramesh, R. and Yang, Z., “Reliability in Cloud Computing: Downtime Predictions for Virtual Servers”, Workshop on Information Technologies and Systems (*WITS 2011*), Shanghai, China.

Du, A.Y., Das, S. and Ramesh, R., “Pricing Volatile IT Resources in Cloud Computing”, Conference on Information Systems and Technology (*CIST 2010*), Austin, TX (**Nominated for the Best Paper Award**)

Du, A.Y., Das, S., Gopal, R. D. and Ramesh, R., “Data and Revenue Management Using Tiered Storage”, Workshop on Information Technologies and Systems (*WITS 2009*), Phoenix, AZ

Du, A.Y., Das, S., Gopal, R. D. and Ramesh, R., “Are Options a Better Option? A Study of Risk Hedging in the Storage Grid Market”, Conference on Information Systems and Technology (*CIST 2009*), San Diego, CA

Chai, S., Das, S. and Rao, H.R., “Trust and Knowledge Sharing: An Investigation of Bloggers’ Knowledge Sharing Practices”, Secure Knowledge Management Workshop (*SKM 2008*), Dallas, TX

Du, A.Y., Das, S., Gopal, R. D. and Ramesh, R., “Resource Pricing and Risk Mitigation for Businesses in Online Storage Grids”, Conference on Information Systems and Technology (*CIST 2008*), Washington, DC

Chai, S., Das, S. and Rao, H.R., “The Exploratory Study of Bloggers’ Information Sharing Behavior: The Moderating Effect of Online Privacy Concerns”, Americas Conference on Information Systems (*AMCIS 2008*), Toronto, Canada

Bapna, R., Das, S., Day, R., Garfinkel, R. and Stallaert, J., “A Clock Auction Model for Stochastic Grid Resource Pricing and Allocation”, International Symposium of Information Systems (*ISIS 2007*), Hyderabad, India

Bapna, R., Das, S., Day, R., Garfinkel, R. and Stallaert, J., “A Clock Auction Model

for Stochastic Grid Resource Pricing and Allocation”, Workshop on Information Systems Economics (*WISE 2007*), Montreal, Canada

Bapna, R., Das, S., Day, R., Garfinkel, R. and Stallaert, J., “A Clock Auction Model for Stochastic Grid Resource Pricing and Allocation”, Conference on Information Systems and Technology (*CIST 2007*), Seattle, WA

Bapna, R., Das, S., Garfinkel, R. and Stallaert, J., “A Continuous Auction Model for Stochastic Grid Resource Pricing and Allocation”, Workshop on Information Technologies and Systems (*WITS 2006*), Milwaukee, WI (**Nominated for the Best Paper Award**)

Das, S., “Timing Movie Release on the Internet in the Context of Piracy”, Conference on Information Systems and Technology (*CIST 2006*), Pittsburgh, PA

Bapna, R., Das, S., Garfinkel, R. and Stallaert, J., “Market Design for Grid Computing”, Workshop on Information Technologies and Systems (*WITS 2004*), Washington DC

TEACHING
EXPERIENCE

School of Management, **State University of New York at Buffalo**

MGS 425: Management of IT Projects (Undergraduate) (2007 – 2011)

MGS 616: Predictive Analytics (2007 - Present)

MGS 625: Management of IT Projects (Graduate) (2007 - 2012)

MGS 653: Social Network Analytics (2013 – Present)

MGS 670: Healthcare Analytics (2019 – Present)

MGS 788: Doctoral Seminar (2008, 2011, 2014)

Latest Teaching Evaluations (on a 5-point scale):

	Overall, this was an excellent course.	Overall, this was an excellent instructor.
MGS 616	4.4	4.7
MGS 649	4.6	4.8
MGS 653	4.3	4.7
MGS 670	4.1	4.3

MITES Regular and Executive Dual Degree MBA/MS Programs, **State University of New York at Buffalo** and **Amrita University**

MGS 560: Contracts and Relationship Management (2009 – 2017)

School of Business, **University of Connecticut** (2002 – 2007)

OPIM 203C: Business Information Systems (Undergraduate)

BADM 260: Online Course in Business Information Systems

Teaching Assistant at School of Business, **University of Connecticut**

OPIM 303: Business Statistics (MBA Core) (2006)

School of Business, **Clarkson University** (2001 – 2002)

IS 414: Database Management Using Oracle 8 (Undergraduate)

IS 614: Database Management Using Oracle 8 (Graduate)
 IS 415: Database Management Applications Using Oracle WebDB
 (Undergraduate)
 IS 615: Database Management Applications Using Oracle WebDB (Graduate)

ACADEMIC
SERVICE

Service to the University

Member, UB Strategic Financial Management Advisory Group. By Provostal appointment. (June 2020 -)

Member, ICDS Director Search Committee. (Feb 2020 -)

Member, School of Engineering and Applied Sciences Dean Search Committee. (November 2019 – March 2020)

Judge, Delaware North StadiumHack2016. June 2016.

Member, SOM Undergraduate Data Analytics Subcommittee (Spring 2016 – Present)

Member, SOM Data Analytics Committee (Fall 2015 – Present)

Member, School of Management Dean Search Committee. (September 2015 – April 2016)

1. Served on the **Profile Subcommittee for the Dean Search**

Member, Personnel Action Committee. School of Management (2014 – 2016)

Member, Non-Tenure Track Faculty Search Committee. (2014 - 2015)

Co-Chair, Tenure Track Faculty Search Committee. (May 2013 – 2014)

Member, Tenure Track Faculty Search Committee. (May 2012 – Feb 2013)

Associate Director. MS MIS Program (2010 – Present)

Member, Policy Committee. School of Management (2012 – 2014)

Member, Non-Tenure Track Faculty Search Committee. (Feb 2012 – Present)

MSS Faculty Liaison. Career Resource Center, School of Management (2011 – Present)

Senator. University Faculty Senate. (2008 – 2010, 2011 – 2013)

Member, Faculty Advisory Committee. “Information Computing Technology” Strategic Strength Area, SUNY Buffalo. (2010 – Present)

Student Research Advising

Doctoral Dissertation Committee Chair:

1. Shuai Yuan (2018, Brock University)
2. Meiling Jiang (in progress)

Doctoral Dissertation Committee Co-Chair:

3. Mohamed Abdelhamid (2017, Cal State Long Beach)
4. Srikanth Venkatesan (2017, Cal Poly Pomona)
5. Victoria Kisekka (2015, Assistant Professor, SUNY Albany, Carnegie)

R1)

Doctoral Dissertation Committee Member:

6. Pamela Howell (2018, NIH Fellow in Bioinformatics, University at Buffalo)
7. Anton Ivanov (2018, Otterbein University)
8. Joana A Lucena G Schaverien Monteiro (2017, University at Buffalo)
9. Chris Bang (2017, Auburn University, Carnegie R2)
10. Ha Hwang, School of Architecture and Planning (2017)
11. Jaeung Lee (2016, Assistant Professor, Louisiana Tech)
12. Wencui Han (2015, Assistant Professor, University of Illinois, Urbana Champaign)
13. Niam Yaraghi (2014, Fellow, Brookings Institute)
14. Onook Oh (2012, Assistant Professor, University of Colorado Denver)
15. Nan Xiao (2012, Assistant Professor, University of Texas Pan-American)
16. Manish Gupta (2011, Vice President, M&T Bank)
17. Serkan Ada (2011, Assistant Professor, Selcuk University, Turkey)
18. Sangmi Chai (2011, Assistant Professor, Ewha Womans University, South Korea)
19. Anna Ye Du (2010, Management Analyst, Texas A&M University)

MS Independent Research Supervisor. SUNY Buffalo: Soham Bhaduri, Anshul Mahalkari, Amar Gunturi, Sameer Halbe, Vishal Padhye, Ian Joyce, Pratiksha Agarwal

MS Thesis Supervisor. Clarkson University: Mark Gorczyca

Service to Academic Conferences

Co-Chair. Conference on Information Systems and Technology, *CIST 2014*, San Francisco, CA. Submissions: **131**.

Review Chair. Workshop on eBusiness, *WEB 2009* conference, Phoenix, AZ. Submissions: **102**.

Session Chair. *INFORMS 2008* and *2009* annual conferences.

Program Committee Member. *CIST 2008, 2009, 2012, 2013*.

Online Submission System and Program Planning Coordinator. Workshop on Information Technologies and Systems, *WITS 2008*, Paris. Submissions: **162**.

Program Committee Member. *WITS 2008, 2009, 2010, 2012*.

Judge, Research Paper Competition. International Symposium of Information Systems, *ISIS 2007*, Indian School of Business, Hyderabad.

Program Committee Member. *ISIS 2007*, Indian School of Business, Hyderabad.

Paper Discussant. International Conference on Information Systems, *ICIS 2004*, Washington DC.

Reviewer at Following Journals

Management Science, Information Systems Research, INFORMS Journal on Computing, Decision Science, Information Systems Frontier, Decision

Support Systems

MEDIA MENTIONS	<p>http://www.buffalonews.com/incoming/article5045.ece</p> <p>http://mgt.buffalo.edu/sites/magazine/archives/2009autumn/departments/Insights. Path:</p> <p>http://mgt.buffalo.edu/sites/magazine/features/mobile.html</p> <p>http://www.buffalo.edu/ubreporter/archives/vol39/vol39n25/articles/SSmithFeature.html. Path:</p>
COMMUNITY SERVICE	<p>Volunteered at Canton-Potsdam Hospital, Potsdam, NY, Summer 2002</p> <p>Taught vocational high school students teamwork, oral communication, problem solving, and conflict resolution skills as a Leadership Instructor with the St. Lawrence-Lewis County BOCES/Clarkson University Leadership and Team Building Educational Partnership Project, 2000 - 2001</p> <p>Taught children of low income families while attending high school, Calcutta, India, 1991 - 1993</p>
MEMBERSHIP	<p>Institute of Operations Research and Management Science (INFORMS) Association of Information Systems (AIS) Beta Gamma Sigma</p>