

Arijit Sengupta

Associate Dean of Accreditation and Technology Systems
Florida International University, College of Business
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Education

Indiana University, Bloomington, Indiana

MS and Ph.D., Computer Science [Minor: Library and Information Science] (1997)

Fellowship: Graduate Assistants in Areas of National Need (GAANN), 1995-1997.

Fields of Concentration: Databases, Document management, Human Computer Interaction

Dissertation: "DocBase: A database environment for structured documents"

Committee: Dr. Dirk Van Gucht (chair), Dr. Andrew Dillon, Dr. David Leake and Dr. Edward Robertson.

Indian Institute of Technology, Kharagpur, India

B.Tech., Computer Science (1992)

Thesis: "Design and Implementation of KOSET: Kharagpur Object-Oriented Software Engineering Tool"

Advisors: Dr. S. C. Desarkar and Dr. S. Subramanian

Work Experience

Full Time Academic

Florida International University, College of Business

Associate Dean of Accreditation and Technology Systems, Dec 2018-Present

Primary duties:

Managing AACSB, SACSCOC and other CoB accreditation processes

Managing the Technology Systems team for developing and adopting mission critical information technology in the college

Leading BizPass – a student engage platform for CoB students

Wright State University, Raj Soin College of Business

Associate Dean of Academic Programs and AACSB Accreditation, Oct 2013-Dec 2018

Selected leadership achievements:

Successful leadership through AACSB and ABET accreditation visits

Creation of a culture of assessment through self-developed assessment system

Development of Passport-to-Success – a platform for student engagement

Creation of a 4-year undergraduate program at the WSU Lake campus

Wright State University, Information Systems and Supply Chain Management, Raj Soin College of Business.

Professor, July 2012 – Dec 2018.

Associate Professor, July 2008 – June 2012.

Assistant Professor, June 2005 – July 2008.

Academic Director, Master of Information Systems Program. Jan 2009-Jan 2011.

Selected Courses taught:

Data and Information Management (MIS 3150): Core database course for newly revised MIS curriculum.

MIS Special topics – Android App Development (MIS 4800): MIS Elective course.

Business Networking and Telecommunications (MIS 425): Senior-level course on Computing Infrastructures, Networking and Security.

Advanced Data Management for the Supply Chain (MIS 794): Blended Learning course covering advanced data management and Enterprise Resource Planning.

Automating Supply Chain with RFID (MIS 433): New course on the Emerging Technology of RFID based on CompTIA certification training.

Business Data Structures (MIS 215): Involves the creation and application of data structures in business applications.

Business Database Systems (MIS 415): Development and management of database systems, with focus on advanced SQL.

Database Management Systems (MIS710): Management and Administration of database systems, transaction processing and distributed databases.

Enterprise Data and Resource Management (MIS7300): Implementations and adoption of ERP systems, Microsoft Dynamics focus.

Assistant Professor, Indiana University, Information Systems, Kelley School of Business, Indiana University.

Adjunct Assistant Professor, Department of Computer Science. August 2001-May 2005.

Courses taught:

Object-Oriented Design and Development (BUS S420) Recent advances in Java and included more problem-solving techniques in the instruction.

Technologies for E-Business (BUS S511) New Course design, based on XML, E-business applications, .NET framework, including ASP .NET and ADO .NET.

Advanced Web Applications Development (BUS S531) New Course design, based on J2EE and XML Web services.

Assistant Professor, Georgia State University, Department of Computer Information Systems, Atlanta, Georgia. August 1999-July 2001.

Duties include teaching 4 course sections per year and conducting research.

Primary course taught:

Fundamentals of Database Management Systems (CIS8140) Restructured the course to include a balance between theory and practice in database management systems.

Director of Educational Development and Assistant Professor. Indiana University, Bloomington. Aug 1997-June 1999.

Duties include teaching 4 courses a year, serving in committees and training new associate instructors.

Courses taught:

Teaching in Computer Science (B599)

Data Structures (C343/H343)

Mastering the World-Wide-Web (A348/A548)

Introduction to Databases (A114)

Professional Experience

Senior Consultant. Crown Partners LLC. Led the development of mobile personnel management systems. Oct 2011-Apr 2012

Project Manager and Chief Technical Officer. TagMaster North America Inc. Led the development of RFID reader-embedded Parking Management System ACTS. 2010-2015.

Senior Consultant. Miller-Adams Electric Company. Led the development of embedded RFID sensor mechanism for a security system. June-Sept 2011

Co-Founder. SmartRF Solutions LLC. Startup Venture to develop Automated Parking Systems with Passive RFID. Sept 2009-July 2010.

Instructional Consulting, United Parcel Service, Atlanta, GA. Provided instruction and training on Java and Object-Oriented Software Development. June-July 1999.

Software Engineering Consultant. Intelligent Micro Systems, Philadelphia, Pennsylvania. Designed components of PRODOC, a commercial workbench for software re(verse) engineering. May-August 1994.

Software Engineer. Oil and Natural Gas Corporation, Dehradun, India. Designed and developed a parser and compiler for C++ on the IBM mainframe system using Pascal. May-August 1991.

Scholarly Publications and Creative Activities

Article

Arijit Sengupta and Hemang Subramanian (2022). User Control of Personal mHealth Data Using a Mobile Blockchain App: Design Science Perspective. *JMIR mHealth and uHealth*, 10(1). <https://doi.org/10.2196/32104>

Arijit Sengupta & Scott Williams (2021) Can an Engagement Platform Persuade Students to Stay? Applying Behavioral Models for Retention, *International Journal of Human-Computer Interaction*, DOI: [10.1080/10447318.2020.1861801](https://doi.org/10.1080/10447318.2020.1861801)

Wang, C., & Sengupta, A. (2020). Seasonal Impact on Cognitive Performance when Socioeconomic Environments Desynchronize with Natural Environments: Evidence from College Students' Academic Performance. *Interdisciplinary Environmental Review*, 20(3/4), 195–216. DOI: [10.1504/IER.2020.10034128](https://doi.org/10.1504/IER.2020.10034128)

Zadeh, A. H., Sengupta, A., Zolbanin, H., & Schultz, T. (2020). Enhancing ERP Learning Outcomes through Microsoft Dynamics. *Journal of Information Systems Education (JISE)*, 31(2), 83–95.

Chakraborty, S., Acharya, R., & Sengupta, A. (2018). A factorial evaluation of commuters' satisfaction on urban mobility - An Indian perspective. *Indian Journal of Management*, 11(11). <https://doi.org/10.17010/pijom/2018/v11i11/138206>

Sengupta, A., & Venkataraman, R. (2011). DocBase - Design, Implementation and Evaluation of a Document Database for XML. *Journal of Database Management*, 22(4), 30–56.

- Sengupta, A. (2012). On the feasibility of using conceptual modeling constructs for the design and analysis of XML data. *DATA & KNOWLEDGE ENGINEERING*, 72, 219–238.
- Sengupta, A., & Ramesh, V. (2011). Document SQL (DSQL): A Conservative Extension to SQL as an Ad-hoc Querying Frontend for XQuery. *Theoretical and Practical Advances in Information Systems Development: Emerging Trends and Approaches*, 316–344.
- Sengupta, A., & Schiller, S. Z. (2010). FlexRFID: A design, development and deployment framework for RFID-based business applications. *Information Systems Frontiers*, 12, 551–562.
- Sengupta, A., & Ramesh, V. (2009). Designing document SQL (DSQL): An Accessible yet comprehensive ad-hoc querying frontend for Query. *Journal of Database Management (JDM)*, 20(4), 26–53.
- Sengupta, A. (2009). CFC (Comment-First-Coding)--A Simple yet Effective Method for Teaching Programming to Information Systems Students. *Journal of Information Systems Education (JISE)*, 20(4), 393–399.
- Sengupta, A., Schiller, S., & Wang, L. (2009). Saving Lives: The Case of RFID-Based Personnel Tracking in a Chinese Coal Mine. *Production and Inventory Management Journal*, 45(1), 44–55.
- Pal, R., Sengupta, A., & Bose, I. (2008). Role of pilot study in assessing viability of new technology projects: the case of RFID in parking operations. *Communications of the Association for Information Systems*, 23(15), 257–276.
- Kim, H., Fox, M. S., & Sengupta, A. (2007). How To Build Enterprise Data Models To Achieve Compliance To Standards Or Regulatory Requirements (and share data). *Journal of the Association for Information Systems*, 8(2), 105–128.
- Sengupta, A., & Sethi, V. (2007). AMCIS 2007 panel summary: The promise of RFID technologies. *Communications of the Association for Information Systems*, 20, 56.
- Kim, H. M., & Sengupta, A. (2007). Extracting knowledge from XML document repository: a semantic Web-based approach. *Information Technology and Management*, 8(3), 205–221.
- Kim, H. M., Sengupta, A., Fox, M. S., & Dalkilic, M. (2007). A measurement ontology generalizable for emerging domain applications on the semantic web. *Journal of Database Management (JDM)*, 18(1), 20–42.
- Sengupta, A., & Dillon, A. (2006). Query by templates: Using the shape of information to search next-generation databases. *IEEE Transactions on Professional Communication*, 49(2), 128–144.
- Kim, H. M., Sengupta, A., & Evermann, J. (2005). MOQ: Web services ontologies for QoS and general quality evaluations. *International Journal of Metadata Semantics and Ontologies*, 2(3), 124.

Sengupta, A., & Puro, S. (2000). Transitioning Existing Content: inferring organisation-specific documents. *Australasian Journal of Information Systems*, 8(1), 91–99.

Dillon, A., & Sengupta, A. (1997). Extending SGML to accommodate database functions: A Methodological Overview. *Journal of the American Society for Information Science and Technology*, 48, 629–637.

Proceeding

Sengupta, A., & Subramanian, H. C. (2020). CHASM: A Blockchain Design Pattern. Presented at the International Conference on Information Systems, Hyderabad, India/Virtual.

Sengupta, A., & Williams, S. D. (2020). Can an Engagement Platform Persuade Students to Stay? Applying Behavioral Models for Retention. Presented at the Academy of Management, Vancouver, BC Canada.
<http://doi.org/10.5465/AMBPP.2020.18189abstract>

Jeyaraj, A., Sengupta, A., & Sethi, V. (2008). Stages in Adoption of RFID Innovations by Organizations: Identifying Facilitators and Inhibitors (p. 286). Presented at the AMCIS 2008 Proceedings.

Mohan, S., Sengupta, A., & Wu, Y. (2007). A rewrite based approach for enforcing access constraints for XML. Presented at the International Conference on Knowledge-Based and Intelligent Information and Engineering Systems, Springer, Berlin, Heidelberg.

Choppella, V., Sengupta, A., Robertson, E. L., & Johnson, S. D. (2007). Preliminary explorations in specifying and validating entity-relationship models in pvs. Presented at the Proceedings of the second workshop on Automated formal methods, ACM.

Mohan, S., Klinginsmith, J., Sengupta, A., & Wu, Y. (2006). Access-access control for xml with enhanced security specifications. Presented at the Data Engineering, 2006. ICDE'06. Proceedings of the 22nd International Conference on, IEEE.

Choppella, V., Sengupta, A., Robertson, E. L., & Johnson, S. D. (2006). Constructing and Validating Entity-Relationship Data Models in the PVS Specification Language: A case study using a text-book example. Presented at the Conference on Automated Formal Methods, Atlanta, GA.

Sengupta, A. (2006). FlexRFID: A Control Logic Architecture for Fast and Flexible RFID-Based System Design. Presented at the Workshop for Information Technologies and Systems.

Mohan, S., Sengupta, A., & Wu, Y. (2005). Access control for XML: a dynamic query rewriting approach. Presented at the Proceedings of the 14th ACM international conference on Information and knowledge management, ACM.

Dalkilic, M., & Sengupta, A. (2005). Circle: design and implementation of a classifier based on circuit minimization. Presented at the Proceedings of the 2005 ACM symposium on Applied computing, ACM.

- Xu, P., & Sengupta, A. (2005). Provenance in Software Engineering-A Configuration Management View (p. 515). Presented at the AMCIS 2005 Proceedings.
- Dalkilic, M. M., & Sengupta, A. (2005). Design and evaluation of catpa: Curation and alignment tool for protein analysis. Presented at the Proceedings of the 2005 ACM symposium on Applied computing, ACM.
- Dalkilic, M. M., & Sengupta, A. (2004). A logic-theoretic classifier called Circle. Presented at the ICARCV.
- Mohan, S., & Sengupta, A. (2004). DocBase--The INEX evaluation experience. Presented at the International Workshop of the Initiative for the Evaluation of XML Retrieval, Springer, Berlin, Heidelberg.
- Sengupta, A., Dalkilic, M., & Costello, J. (2004). Semantic thumbnails: a novel method for summarizing document collections. Presented at the Proceedings of the 22nd annual international conference on Design of communication: The engineering of quality documentation, ACM.
- Sooriamurthi, R., Sengupta, A., Menzel, S., Moor, K. A., Stamm, S., & Borner, K. (2004). Java engagement for teacher training: An experience report. Presented at the Frontiers in Education, 2004. FIE 2004. 34th Annual, IEEE.
- Sengupta, A., Mohan, S., & Doshi, R. (2003). XER-extensible entity relationship modeling. Presented at the Proceedings of the XML 2003 Conference, Citeseer.
- Sengupta, A., & Dalkilic, M. (2002). DSQL - An SQL for Structured Documents Extended Abstract. Presented at the International Conference on Advanced Information Systems Engineering, Springer, Berlin, Heidelberg.
- Purao, S., Storey, V., Sengupta, A., & Moore, M. (2000). Reconciling and cleansing: an approach to inducing domain models. Presented at the Int. Workshop on Information Systems and Technologies (WITS).
- Sengupta, A., Wilson, D. C., & Leake, D. B. (1999). Constructing and Transforming CBR Implementations: Techniques for Corporate Memory Management. Presented at the ICCBR Workshops.
- Sengupta, A., Wilson, D. C., & Leake, D. B. (1999). On constructing the right sort of CBR implementation. Presented at the Proceedings of the IJCAI-99 Workshop on Automating the Construction of Case Based Reasoners.
- Sengupta, A. (1998). Toward the union of databases and document management: The design of DocBase. Presented at the Proceedings of COMAD-98. Tata McGraw Hill, Citeseer.
- Sengupta, A., & Dillon, A. (1997). Query by templates: A generalized approach for visual query formulation for text dominated databases. Presented at the Digital Libraries, 1997. ADL'97. Proceedings., IEEE International Forum on Research and Technology Advances in, IEEE.

Book Chapter

- Sengupta, A. (2015). Automated Product Identification Using RFID (Radio Frequency Identification). In *Wiley Encyclopedia of Management* (pp. 1–6).
- Sengupta, A., & Venkataraman, R. (2013). DocBase: Design, Implementation and Evaluation of a Document Database for XML. In *Innovations in Database Design, Web Applications, and Information Systems Management* (pp. 365–393). IGI Global.
- Sengupta, A., & Kim, H. (2007). SWAP-A Framework for Ontology Support in Semantic Web Applications. In *Advances in Electronic Business, Volume 2* (pp. 309–319). IGI Global.
- Mohan, S., & Sengupta, A. (2005). Conceptual Modeling for XML: A Myth or Reality. In *Database Modeling for Industrial Data Management: Emerging Technologies and Applications* (pp. 293–322).
- Ramesh, V., & Sengupta, A. (2005). J2EE Vs .NET: An Application Development Perspective. In *IS Management Handbook 8th Ed* (pp. 415–424). CRC Press.
- Sengupta, A. (2001). Database concepts for marked-up textual documents. In *Text databases & document management*. IGI Publishing.
- Ramesh, V., & Sengupta, A. (1999). J2EE versus .NET: An Application Development Perspective. In *IS Management Handbook* (pp. 435–444). Auerbach Publications.

Reports

- Sengupta, A. (2009). *Document SQL (DSQL)-An Accessible Yet Comprehensive Ad-hoc Querying Frontend for XQuery. Technology First* (p. 14).

Presentation, Presented Papers, and Lectures

- Klein, R., & Sengupta, A. (2019). Florida International University's BizPass Mobile App. In *Southern Business Administration Association*. Myrtle Beach, SC.

Intellectual Property

- Black, T. C., Weaver, K. S., Miller Sr, R. J., Sengupta, A., & Good, J. A. (2019). Smart gun technology. 10,365,057.

Case Study

- Sengupta, A. New Start-Up Company Makes Parking a Whole Lot Smarter!, *Technology First* 5 (2010).

Invited Articles

- Arijit Sengupta. "Decision Sciences Institute Job Placement Services Update". *Decision Line* 38(4). July 2007. Pp. 25-26

Arijit Sengupta. "You've got RFID... Now What? Be Flexible... Do FlexRFID!" in *Technology First*, Dayton, January 2007. p.9

Arijit Sengupta and Henry M. Kim. "SWAP – A Framework for Ontology Support in Semantic Web Applications". In *AIS SIGSEMIS Bulletin*, 2(1), pp. 48-52, March 2005.

Arijit Sengupta. "Information Technology Innovations at the Decision Sciences Institute" *Decision Line*, 34(5) September 2003, pp. 14-18

Other Scholarly Work

Sengupta, A., & Wilde, E. (2006). The case for conceptual modeling for XML. *TIK Report*, 244.

Sengupta, A. (1997). Docbase: a database environment for structured documents. *Indiana University Ph.D. Thesis*.

Arijit Sengupta. "Design and Implementation of KOSET: Kharagpur Object-Oriented Software Engineering Tool". B.Tech. Thesis. Computer Science and Engineering Department, *Indian Institute of Technology, Kharagpur. B.Tech. Thesis*.

Teaching Innovation and Other Relevant Teaching Activities

Fall 2019 - Ongoing

PantherChain - Blockchain Platform for FIU Business Blockchain curriculum, Use of technology and software,

Developed PantherChain - a ground up blockchain platform to contribute to ISBA Blockchain curriculum.

Summer 2019 - Spring 2020

Achieved QM certification for ISM 3011, Quality Matters (QM) certification,

Professional Honors, Prizes, Fellowships

MSIS Best Professor Award, 2020, 2023, FIU Business

Landon Innovative Teaching Grant, 2019, FIU Business

Mid-American Business Deans Association (MABDA) Innovation in Business Award. First Place Award. Received for Proposal "Assess My Program (AMP) – Using a collaborative online approach to improve the assurance of learning process" Sep 2016

Raj Soin College of Business Outstanding ISOM Teacher Award, June 2012. Received this award five years in a row.

Raj Soin College of Business Outstanding ISOM Teacher Award, June 2011.

Raj Soin College of Business Outstanding ISOM Teacher Award, June 2010.

Southwestern Ohio Council of Higher Education (SOCHE) Award of Excellence in Teaching. April 2011.

Raj Soin College of Business Outstanding ISOM Teacher Award, June 2009

“Greater Dayton’s Top 40 under 40 Award” April 2009

Raj Soin College of Business Outstanding Researcher Award. May 2008.

Raj Soin College of Business Outstanding ISOM Teacher Award. May 2008.

Rudolph J. Joenk, Jr. Award for Best Paper in the [2006] IEEE Transactions on Professional Communication. July 2007.

Nominated for the Wright State University Presidential Award for Early Faculty Achievement. May 2007.

Raj Soin College of Business Outstanding Researcher Award. Nov 2006.

“Microsoft .NET Peer-to-peer award” – December 2003. Microsoft Corporation. One of four universities selected to Microsoft .NET peer-to-peer showcase at ICIS 2003, Seattle, WA, Dec 15-17, 2003.

TERA (Teaching Excellence Recognition Award), March 1998.

GAANN Fellowship, US Dept. of Education, 1995-1997.

Best B.Tech. Project Award, Indian Institute of Technology, Kharagpur, India, 1992; one of two best undergraduate projects among 200.

National Talent Search Scholarship, Dept of Education, India, 1986-92; best 100 scores in nationally conducted tests/interviews among 100,000 high school graduates in India.

Professional Licensure and Certification

Alien Technology RFID Academy Certification, 2006, Ohio, Alien Technology

CompTIA RFID+ Certification, 2007, Nevada, CompTIA

Digital Measures/Activity Insight Administrator Certificate, 2016, Wisconsin, Digital Measures

Grants and Funded Research

Ohio State Infrastructure Capital Funding Grant. “D.A.V.E. – Data Analytics and Visualization Environment”. With Dr. Joanne Li and Dr. Shu Schiller. Funded \$600,000.

RFID Lab Continuing Development, Ohio House Bill, (December 2008 - June 2009). Total Award amount: \$22,200.

“Preventive Maintenance of RFID implementations – Phase II.” Alien Technology Federal Pass-through Grant. PI with co-PI Dr. Vikram Sethi. Total grant value \$25,000. Mar 2008

RFID Lab Development. Ohio House Bill Award. December 2007. Total award amount \$42,600.

“Wright Research Initiative for the Technological Evolution with RFID (WRITER)”. Wright State University Research Challenge/ Major Collaboration Award. Award amount \$25,000. PI, with co PIs Dr. Vikram Sethi and Dr. XinHui Zhang. May 2007.

“Preventive Maintenance of RFID implementations.” Alien Technology Federal Pass-through Grant. PI with co-PI Dr. Vikram Sethi. Total grant value \$25,000. Mar 2007

“CompTIA RFID+ - Alien Academy Bridge”. Alien Technology Curriculum Development Grant. PI with co-PI Dr. Vikram Sethi. Total Grant value \$27,000. Mar 2007.

“ROI with RFID”. Alien Technology Federal Pass-through Grant. PI with co-PI Dr. Vikram Sethi. Total Grant value \$20,000. Mar 2007.

Alien Technologies Equipment Grant. Grant valued at \$3,500. August 2006.

“Managing data in the RFID-driven supply chain” Wright State University Research Initiation Grant. Awarded \$10,000. April 2006.

“An Architecture for Secure and Integrated Management of XML and Relational Data.” Wright State University Research Challenge Early Start/Augmentation Grant Competition. Awarded \$21,000. January 2006.

“Microsoft .NET Curriculum Development Grant” – February 2002. Microsoft Corporation. William Perkins (project director), Arijit Sengupta (member of development team) and V. Ramesh. One time grant of \$30,000 cash, hardware and software valued at \$37,544, and training costs as requested.

“Incorporating Solaris and Java Technologies into the new MS Information Systems Curriculum” February 2002. Sun Microsystems – Arijit Sengupta (co-principal investigator), Ramesh Venkataraman and Tracy Connolly. One time infrastructure grant, approximate total dollar value of \$50,000.

Faculty Mentoring Grant. September 2000. Awarded \$10,000 for conducting research on “DocBase II” – the next generation digital library system.

Research and Infrastructure Grant, National Science Foundation, 1996.

University Committees

Marketing/SCM tenure-track faculty hiring committee Member (Fall 2019 - Spring 2020)

Marketing instructor hiring committee Member (Fall 2019 - Fall 2019)

Public Interest Technology Steering Committee Member (Spring 2019 - Ongoing)

Faculty Senate Online Committee Member (Spring 2019 - Summer 2019)

Other Institutional Service

Spring Virtual Graduation, COB Deans Office (Spring 2020 - Spring 2020)

Fall Landon Graduation, COB Landon Undergrad School (Fall 2019 - Fall 2019)

Fall Chapman Graduation, COB Chapman Graduate School (Fall 2019 - Fall 2019)

Summer Landon Graduation, COB Landon Undergrad School (Summer 2019 - Summer 2019)

Summer Chapman Graduation, COB Chapman Graduate School (Summer 2019 - Summer 2019)

External Service

Reviewer for IEEE Transactions on Engineering Management IEEE (Fall 2019 - Fall 2019)

Offices Held in Professional Societies

Association of Information Systems (2001 - Ongoing)

Decision Sciences Institute (1999 - Ongoing)

Professional Development

FIU Provost's Hybrid Certification Program (Fall 2020-Spring 2021)

Remote Teach Ready Badge 6 (Summer 2020 - Summer 2020)

ConfIRM Virtual Conference 0 (Summer 2020 - Summer 2020)

AACSB Global Accreditation Conference 0 (Fall 2019 - Fall 2019)

EdIT Conference 5 (Fall 2019 - Fall 2019)

FIU Online Con 2019 6 (Fall 2019 - Fall 2019)

FIU Manager Webinars 4.5 (Fall 2019 - Spring 2020)

IBM Blockchain Workshop 0 (Summer 2019 - Summer 2019)

Attendance at CLADEA Deans Panel 0 (Summer 2019 - Summer 2019)

Academic Assessment 16 (Spring 2019 - Summer 2019)

Attendance to 3 Canvas workshops 4.5 (Spring 2019 - Spring 2019)

CPE 1000 Assessment Certificate 1.6 (Spring 2019 - Spring 2019)