

Dr. Daniel N. Owunwanne

5104 CHESHIRE LANE

LANHAM, MD 20706

Phone: (301) 731 – 6138, Cell: (301) 613 – 2710

dowunwanne@howard.edu

CAREER

OBJECTIVES: Professor of Computer Science and Information Systems.

EDUCATION:

George Mason University, Fairfax, VA:

Ph. D. degree in Computational Science and Informatics,
August, 2004. Dissertation title: “Unified Modeling Language
(UML) for Data Interoperability in Federated Distributed Database”.

Howard University, Washington, DC:

M.S. degree in Computer Science, July 1986.

Concentration in Systems Analysis & Design and Programming
Languages. COURSES: Real Time Analysis, Systems Analysis,
Programming Method, Switching Theory, Operations Research,
Logical Design, Database Management Systems, and Programming
Languages.

Old Dominion University, Norfolk, VA:

(Part Time ... 1989/92). COURSES: Computer Graphics,
Computer Networks, Artificial Intelligence (AI), and Software
Engineering.

State University College at Buffalo, NY:

B.S. degree in Computer Information Systems Management,
December 1983. COURSES: Operating Systems, Computer
Structure and Organization, Communication Systems, Database
Management, and Systems Analysis.

EDUCATIONAL HIGHLIGHTS:

Programming Languages: Proficient in C++, Java, FORTRAN,
Solution Algorithms, Pseudocodes for designing programs,
COBOL, Pascal, BASIC, and JCL System. Other languages
include: Assembly Languages, Ada, APL, and C Language.

Software Packages: Microsoft Office, Splus, Matlab.

Database: Oracle, MS Access SQL, IBM DB2, PostgreSQL.

Internet: HTML, XML for designing Websites.

Operating Systems: UNIX, Linx, Microsoft Windows.

Hardware: IBM 360/370, Burroughs 6800, VAX, NEXT, HP 3000,
Laptops, and host of Personal Computers.

EXPERIENCE: Howard University, Washington, DC:
August 2011 – Present: Associate Professor (Tenured)
August 2004 – May 2011: Assistant Professor.
August 2003 – May 2004: Instructor.

PGCPS:
Sept. 1999 – June 2003: Computer Science Teacher.

Luke C. Moore Academy, DCPS:
October 1993 – June 1999: Computer Science Teacher.

University of the District of Columbia, Washington, DC:
1994 – 1996: Adjunct Professor:
Taught COBOL, Data Processing, COBOL,
FORTRAN, and Systems Analysis and Design.

Elizabeth City State University, NC:
January 1986 – July 1993: Instructor:
Taught Computer Science courses and Mathematics which include
COBOL, FORTRAN, Pascal, BASIC, Data Structures, File Manag-
ement, Systems Programming, Computer Networks, Computer
Architecture, Computer Graphics, Systems Analysis and Design,
Database Concepts, and College Algebra.

Advised students relative to their academic programs. Assist in the
general strengthening of the department. Revised the whole
Computer Science curriculum of the department in accordance to the
ACM/IEEE joint curriculum task force to meet the Federal CSAB
and CSAC standard.

Howard University, Washington, DC:
August 1985 – December 1985: Teaching Assistant:
Taught FORTRAN under Prof. Semple, graded and corrected
students home work assignments.

May 1984 – July 1985: Research Assistant:
Worked for NASA via Computer Science department on Software
Implemented Fault Tolerance (SIFT) System.

State University College at Buffalo, NY:
September 1983 – December 1983: Tutor:
Tutored students in Computer Science and Mathematics.

CERTIFICATE: Software Engineering Workshop for Undergraduate Faculty,
Georgia State University, Atlanta, GA. Funded by National Science
Foundation – NSF, August 1990.

PUBLICATIONS: *Refereed Journals*

Idemudia, Efosa; Owunwanne, Daniel (2026), “The Analysis of the use of Artificial Intelligence for Research, Innovation, and Competitive Advantage in the Post-Pandemic Era ”, Int Journal of Intelligent Systems Design and Computing (IJISDC), (forthcoming).

Rustagi, Narendra K; Owunwanne, Daniel N (2019), “Cheating/Misconduct in Higher Education – Challenges and Solution”, Washington Research Journal, Vol 9, No. 1, Pages 58 – 76, November 2019.

Owunwanne, Daniel (2014), “Effectiveness of Data Transmission with Media Access Control (MAC) and Error Correction using Automatic Repeat Request (ARQ).” International Journal of Science and Informatics (IJSI), Vol 4, Fall 2014.

Owunwanne, Daniel; Rustagi, Narendra; Dada, Remi (2010), “Students Perception of Cheating and Plagiarism In Higher Institution.” Journal of College Teaching and Learning, ISSN: 1544-0389, Vol. 7, No. 11, November 2010.

Goel, Rajni; Owunwanne, Daniel (2010), “Radio Frequency Identification (RFID) Technology: Gaining A Competitive Value Through Cloud Computing.” International Journal of Management and Information Systems (IJMIS), Vol. 14, No. 4, 4th Quarter, 2010.

Owunwanne, Daniel; Okoro, Ephraim; Quasem, Mohammad (2010); “Managing and Promoting Diversity in Educational Environment: Evaluation of Faculty Presence and Equity Participation.” International Journal of Effective Management (IJEM), Vol. 7, No. 1, June 2010.

Owunwanne, Daniel (2010), “An Analysis of the Effectiveness of Error Detection in Data Transmission Using Polynomial Code Method.” International Journal of Management and Information Systems (IJMIS), Vol. 14, No. 2, 2nd Quarter, May 2010.

Owunwanne, Daniel (2009), “The Importance of Software Implemented Fault Tolerance in Highly Reliable Systems.” Washington Business Research Journal (WBRJ), Vol. 1, No. 1, December 2009.

Owunwanne, Daniel (2009), “Information Sharing In Homogeneous Federation of Databases And Performance Assessment,” International Journal of Effective Management, Vol. 6, No. 1, June 2009.

Quasem, Mohammad; Owunwanne, Daniel; Agarwal, Kamal (2008), "Six Sigma is the Vehicle to Improve Productivity Towards Perfection," International Journal of Effective Management, Vol. 5, No. 1, December 2008.

Owunwanne, Daniel; Agarwal, Kamal (2007), "Outsourcing eCommerce Effects in the Global Market and its Statistical Survey", The Journal of E-Business, Vol. VII, No.2, pages 49 - 58.

Owunwanne, Daniel (2006), "Interfacing Databases in Federated Distributed Systems for Data Sharing," Journal of Global Information Technology, Vol. 1, pp. 1 – 11.

PUBLICATIONS (contd.): *Conference Proceedings (Selected Few):*

Owunwanne Daniel; Okoro, Ephraim (2019), "An Analysis of the Role of Database in Global Marketing", Review of Business and Technology Research Proceeding, MTMI, September 2019.

Rustagi, Narendra K; Owunwanne, Daniel N (2019), "Cheating/Misconduct in Higher Education – Challenges and Solution", Washington Business Research Forum, March 22-23, 2019.

Owunwanne, Daniel (2013), "The Importance of Data Transmission with Media Access Control (MAC) and Error Correction Using Automatic Repeat Request (ARQ)." Review of Business and Technology Research (RBTR), ISSN 1941-9414, Vol. 9, No.1, October 2013.

Kilel, Beatrice; Owunwanne, Daniel (2011), "Assessing Cancer Status in Developing Countries Using Cloud Computing and Informatics Tools." Review of Business and Technology Research, Vol. 5, No. 1; October 2011.

Owunwanne, Daniel; Goel, Rajni (2010), "Hosting Radio Frequency Identification (RFID) Technology in the Cloud." Global Digital Business Review, Vol. 4, No. 1; pages 151 – 156, October 2010.

Quasem, Mohammad; Okoro, Ephraim; Owunwanne, Daniel (2009), "Workforce Diversity: Its Impact on Productivity Improvement." Proceedings of The Washington Business Research Forum, Arlington, VA; January 2, 2009.

Quasem, Mohammad; Okoro, Ephraim; Owunwanne, Daniel (2009), "An Analysis of the Role of ISO in Production Management and Quality Improvement." Proceedings of The Washington Business Research Forum, Arlington, VA; January 2, 2009.

Owunwanne, Daniel; "An Investigation of Error Detection in Data Transmission Using the Polynomial Code Method." Global Digital Business Review, Vol. 3, No. 1; Pp 172 – 176, October 2008.

Owunwanne, Daniel; Agarwal, Kamal; “The Effect of Outsourcing eCommerce Customer Support in the Global Market.” Proceedings of the International Academy of E-Business, Vancouver, Canada, April 2007.

Owunwanne, Daniel; “Data Interoperability in Homogeneous Distributed Database Systems.” Proceedings of the 2007 International conference on Frontiers in Education: Computer Science and Computer Engineering (FECS’07), Las Vegas, June 2007.

Quasem, Mohamed; Owunwanne, Daniel; “The Role of Six Sigma in Achieving Perfection.” Proceedings of Joint Statistical Conference, Salt Lake City, Utah, August 2, 2007.

Owunwanne, D; “Data Interoperability Assessment with JDBC Interface in Federated Database Systems.” Refereed Proceedings of the International Digital Business Academy, Digital Business Review, Los Vegas, Sept. 25-28, 2005.

Owunwanne, D; “Assessment Performance of Data Interoperability In Federated Distributed Database Systems.” Computing Science and Statistics, Vol. 36; Interface of North America, St Louis, MO; June 8 – 12, 2005.

PROFESSIONAL MEMBERSHIP: Interface of North America and Classification Society of North America – IFNA/CSNA.
International Digital Business Academy – IDBA.
Virginia Academy of Science – VAS.

PROFESSIONAL AFFILIATION: Association for Computing Machinery – ACM.
Special Interest Group on Computer Graphics – SIGGRAPH.
National Association of Mathematics – NAM.

AWARDS/HONORS: Awarded “2006-2007 Professor of the Year Certificate” in the Department of Information Systems and Decision Sciences by the Howard University COBIS Society in March 30, 2007.

January 2008, *Certificate of Special Congressional Recognition* – in recognition of outstanding and invaluable service to the community **by the United States House of Representatives.**

January 2008: *Certificate of Special Congressional Recognition* – in recognition of outstanding and invaluable service to the community **by the United States Member of Congress.**

The U.S. President’s 2007 Volunteer Service Award – in recognition and appreciation of commitment to strengthening the US Nation and for making a difference through volunteer service. Presented by the President’s Council on Service and Civic Participation.

Awarded “Second Place, Best Student Paper” by Virginia Academy of Science, Computer Science section during the 81st Annual Conference, University of Virginia, Charlottesville, VA; May 27 – 30, 2003.

Awarded Computer Science Fellowship by NASA, Langley Research Center, Hampton VA, 1985.

**EXTRA
CURRICULAR
ACTIVITY:**

African Christian Fellowship, Washington DC, Metro Chapter:
 . President: 2013 - 2016
 . Vice President: 2005 – 2006
Faculty Grievance Commission (FGC), Howard University Senate:
 . Member: 2013 - Present
Committee of Committees (CoC), Howard University Senate:
 . Member: 2011 - Present
Engineering Graduate Association:
 . Member

CONFERENCE PAPER PRESENTATIONS (*Selected Few*):

“Cheating/Misconduct in Higher Education – Challenges and Solution.” Presented at the Washington Business Research Forum, Arlington, Virginia, March 2019.

“The Power of Six Sigma.” Presented at the Modern Technology and Management Institute (MTMI), Virginia Beach, VA; September 2016.

“The Analysis and Effectiveness of Six Sigma.” Presented at the International Educators Group and International Academy of Business, Washington, DC; October 2016.

“An Exploration of Views On Cheating and Plagiarism Among University Students.” Presented at the Washington Business Research Forum, Arlington, VA; March 4, 2016.

“Plagiarism and Cheating In Institution of Higher Learning – An Exploration.” Presented at the International Educators Group and International Academy of Business, Washington, DC; October 17, 2015.

“Addressing the Perceptions of Students’ Cheating and Plagiarism in Institutions of Higher Learning.” Presented at the Modern Technology and Management Institute (MTMI), Virginia Beach, VA; September 12, 2015.

“The Importance of Data Transmission With Media Access Control (MAC) And Error Correction Using Automatic Repeat Request (ARQ).” Presented at the Modern Technology and Management Institute, Virginia Beach, VA; September 2013.

“Assessing Cancer Status in Developing Countries Using Cloud Computing and Informatics Tools.” Presented at the MTMI Annual International Conference on Global Issues in Business and Technology, New Carrollton, MD; October 20-22, 2011.

“An Evaluation of Error Detection and Correction in Data Transmission using Cyclic

Redundancy Code (CRC).” Presented at the Washington Business Research Forum, Embassy Suites, Washington D.C. Convention Center, January 7, 2011

“Hosting Radio Frequency Identification (RFID) Technology in the Cloud.” Presented at the Digital Business Association, New Carrollton, MD; October 15, 2010.

“An Assessment of International Outsourcing on Domestic Productivity: A Focus on the U.S. Economy.” Presented at the Digital Business Association, New Carrollton, MD; October 15, 2010.

“An Analysis of Outsourcing on Domestic Business and the Economy.” Presented at the Washington Business Research Forum, Arlington, VA; January 2, 2009.

“Workforce Diversity: Its Impact on Productivity Improvement.” Presented at the Washington Business Research Forum, Arlington, VA; January 2, 2009.

“An Analysis of the Role of ISO in Production Management and Quality Improvement.” Presented at the Washington Business Research Forum, Arlington, VA; January 2, 2009.

“An Investigation of Error Detection in Data Transmission Using the Polynomial Code Method.” Presented at the Digital Business Association, New Carrollton, MD; October 16, 2008.

“The Importance of Software Implemented Fault Tolerance In Highly Reliable Systems.” Presented at the Annual Washington Business Research Forum, Arlington, VA. January 4, 2008.

“Data Interoperability in Homogeneous Distributed Database Systems.” Presented at the International conference on Frontiers in Education: Computer Science and Computer Engineering (FECS’07), Las Vegas, NV., June 27, 2007.

“The Effect of Outsourcing eCommerce Customer Support in the Global Market”. Presented at the International Academy of E-Business (IAEB) conference at Vancouver, Canada, April 7, 2007.

“Assessment Performance of Data Interoperability In Federated Distributed Database Systems”. Presented at the Annual Meeting of the Computing Science and Statistics of Interface of North America, St. Louis, MO, June 8-12, 2005.

"Using UML Approach To model Data Interoperability In Federated Database Systems," Presented at the 81st Annual Conference, Charlottesville VA.; during the Virginia Academy of Science, May 2003.

SEMINAR PRESENTATION:

IBM Technology Transfer Program (TTP)

Gave a presentation on how IBM DB2 database was infused and operating at Howard University. IBM TTP Seminar: Atlanta, GA 2006

CONFERENCE CHAIR:

Global Digital Business Association, 2010 Annual Conference,

Session 1A: Global Competitiveness.
Four Points by Sheraton Hotel, New Carrollton, MD, October, 2010.

Global Digital Business Association, 2008 Annual Conference,
Session 1A: Higher Education Strategy.
Four Points by Sheraton Hotel, New Carrollton, MD, October, 2008.

The International Academy of e-Business, 7th Annual Conference,
Session S3: Selected Topics in Tango room.
Pacific Palisades Hotel, Vancouver, BC, V6E 1C4, Canada, April, 2007.

The Washington Consortium of Business School, Howard University:
Chaired a section with Dr. Quasem, December 4, 2006.

RESEARCH GRANTS APPLIED:

Project Title	Source	Amount	Period
A Collaborative Geographically Distributed Approach to Teaching Grid Computing. (In collaboration with George Mason University (GMU), January 2007).	National Science Foundation - NSF	\$500, 000.00	Two Years (2007 and 2008)

RESEARCH GRANTS FUNDED:

Name of Grant	Source	Amount	Period
<i>Project Title:</i> “The Importance of Data Transmission with Media Access Control (MAC) and Error Correction Using Automatic Repeat Request (ARQ)”	Howard University, School of Business	\$9, 500.00	Summer 2010
<i>Project Title:</i> “An Investigation of Error Detection in Data Transmission Using the Polynomial Code Method”.	Howard University, School of Business	\$6,000.00	Summer 2008
<i>Project Title:</i> “Data Interoperability in Homogeneous (IBM DB2 and SQL Server) Distributed Database Systems”.	School of Business Howard University.	\$6,000.00	Summer 2006

Conferences Attended For Professional Development:

Title	Place	Date
<u>A. Conferences:</u>		
1. MTMI on Global issues in Business and Technology.	Virginia Beach, Virginia	September 20-21, 2013
2. The Washington Business Research Forum.	Washington, DC.	January 7-8, 2011
3. Global Digital Business Association conference	New Carrollton, Maryland.	October 14 – 16, 2010
4. The Washington Business Research Forum	Arlington, Virginia.	January 2 - 3, 2009
5. Global Digital Business Association conference.	New Carrollton, MD	October 15 – 18, 2008
6. KPMG’s Faculty Symposium 2008	Philadelphia, PA	May 29 – 30, 2008
7. The Annual Washington Business Research Forum	Arlington, VA	January 4 – 5, 2008
8. International conference on Frontiers in Education: Computer Science and Computer Engineering (FECS’07).	Las Vegas	June 25-28, 2007
9. The International Academy of E-Business (IAEB) conference.	Vancouver, Canada	April 5 – 8, 2007.
10. Microsoft Academic Day conference on “Operating Systems and Databases	Toronto, Canada.	May 22 – 25, 2006.
11. Computing Science and Statistics conference, Interface of North America.	St. Louis, MO	June 8-12, 2005.
12. Virginia Academy of Science.	Charlottesville, VA	May 27- 30, 2003.

Seminars And Workshops Attended For Professional Development:

B. <u>Seminars and Workshops:</u>		
1. Howard University Partnership Development and Design (HUPDD)	Army Research Lab, Adelphia MD; & Bowie State Univ, Bowie MD.	May 30, 2019. & February 22, 2019.
2. Workshop on Blackboard CETLA iLab	Howard University Washington, DC	March, April 2019 & Fall 2013.
3. Black Data Processing Association (BDPA)	Washington, DC	July 2013
4. Virtual Computing Lab Technical Workshop with SURA and IBM:TTP on Cloud Computing.	George Mason University Fairfax, VA	July 13 – 14, 2009
5. Harvard Business School (HBS) Publishing on Case Studies.	Watertown, MA	November 7 – 8, 2008
6. IBM: Technology Transfer Program (TTP) e-Meeting, CETLA iLab.	Howard University Washington, DC	August 8, 2007
7. IBM: Technology Transfer Program (TTP), Professor's Forum.	Atlanta, GA.	December 18 – 19, 2006.
8. The Consortium of Business Schools.	Howard University Washington, DC	December 4, 2006.
9. IBM: Technology Transfer Program: Faculty evaluation on DB2 Infusion in our Database curriculum.	Atlanta, GA	December 19-20, 2005.
10. IBM: Technology Transfer Program – TTP. (The infusion of DB2 into Database Management course – Info 330).	Atlanta, GA	July 14 – 15, 2005
11. Microsoft Academy Day.	Orlando, FL	June 3 – 5, 2005

Titles and Descriptions of Current Courses Taught:

Computer Introduction:

This course is designed to introduce students to the basic computer concepts and instructions on how to use common desktop applications. The course focuses on basic computer components, Internet skills and learning to use the Microsoft Office Suite.

Business Problem Solving (BPS):

This course is designed to introduce students to the basic concepts of problem solving methodologies. The objective is to improve students analytical thinking and reasoning skills, provide students with a systematic process for thinking through a problem when they do not know what to do (i.e. when confronted with an intractable problem), provide students with strategies that is applicable for solving problems in any business discipline. Students will utilize Spreadsheet (Microsoft Excel) tools to view and organize data, conduct analyses, and produce solution as appropriate.

Management Information Systems (MIS):

This course provides students with concepts of how to use information technology (IT) to master their current or future jobs and to help ensure the success of their organization. The focus is to *learn* the basic concepts of information technology and systems, and *apply* those concepts to facilitate business processes. Case Studies and hands on projects will be completed by students in order to understand the role of Information Systems (IS) in various business functionalities.

Introduction to Software Design:

To introduce and demonstrate concepts of structured programming techniques. To develop a critical foundation in analyzing software requirements and systematically developing structured approach using pseudocode and other similar techniques in developing solutions to meet requirements. In this course, students are also taught to convert their pseudocode design or any algorithm into the actual programming instructions in C++ or Java Language.

Introduction to Data and Network Communication:

A comprehensive study of the communication hardware, software and regulation required to deliver information from a source through a medium to a destination. Digital, analog, security, network and network management requirements for data communication are introduced and implemented using software simulations.

Database Management:

The course is an overview of the database approach and database management systems (DBMS). Topics include physical, conceptual, and external views of data. Logical and physical data structures using Entity Relationship Diagram (ERD) and SQL for data retrieval. Referential integrity, data definition and data manipulation languages (DDL & DML). The course also covers the enterprise data model, the hierarchical data model, security and concurrency control, and client server computing.

Information Structures (Advanced C++):

This course involves extensive work in the solution of business applications applying Information Structures. This course uses C++ Programming language, including the methods of program design and development, using a structured approach. Included in the course will be the following concepts: proper documentation techniques, coding, debugging, subprograms, arrays, searching, sorting, stacks, queue, and linked lists.

Systems Analysis and Design:

The course provides a systematic approach to analysis and design of contemporary business information systems. Topics include Systems Development Life-cycle (SDLC) phases and activities, systems analysis techniques, systems design techniques, detail program design and implementation.