Debalina Bera, Ph.D.

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PRIMARY TEACHING/RESEARCH AREA

- Cyber Security, Business Analytics, Blockchain, Python

SPECIFIC RESEARCH INTERESTS

- Cyber Security and Privacy
- Data/Text Analytics (Python)
- Blockchain
- Information security

TEACHING INTERESTS

- Business Analytics Programming (python)
- Database Management System
- Big Data Analytics and Text Analytics
- Information Security and Cryptography
- System Analysis and Design, and Project Management

EDUCATION

Ph.D. in (Business Computer Information Systems)   **April 2022**
University of North Texas, TX, USA
G. Britt Ryan College of Business, Dept: Information Technology and Decision Science
Minor in **Business Analytics**
Cumulative GPA: 3.916/4
Dissertation (Advisor: Dr. Dan J. Kim): Three Essays on Cyber-Fraud, Phishing Susceptibility, and Detection Accuracy
Completed Proposal Defense: 10/29/2021.
Completed Final Defense: 4/22/2022.

M.S. in Engineering Management   September 2017
St. Cloud State University, MN, USA
MEM in Plymouth
Capstone Project (Advisor: Dr. Hiral Shah): Implication of Blending Agile and SDLC Method on Software Project Execution and Information Security

B. Tech in Information Technology   August 2006
West Bengal University of Technology, WB, India
Capstone Project: Developing hospital management system using .net: a use-case scenario

WORK EXPERIENCE

August 2022 – December 2022, Faculty, University of Oklahoma, Norman, OK
2019 – July 2022, Teaching Fellow, University of North Texas, Denton, TX

2018 – 2019, Graduate Assistant and Research Assistant, University of North Texas, Denton, TX
2017 – 2018, Database Analyst, Ditech Financial, Tata Consultancy Services, Kolkata, India
2013 – 2015, Software Audit Compliance Manager, IT Audit, Oracle Enterprise Solution, Tata Consultancy Services, Kolkata, India
2012 – 2013, Software Quality Assurance Manager, American Greetings Corporation, Tata Consultancy Services, Kolkata, India
2010 – 2013, Quality Engineer, Citi Bank, Tata Consultancy Services, Kolkata, India
2008 – 2010, Peoplesoft Techno-Functional Analyst, British Telecom, Tata Consultancy Services, Kolkata, India
2007 – 2008, Actuate Developer, Tata Consultancy Services, Kolkata, India

UNDER REVIEW or WORKING PAPERS/PROPOSALS

Debalina Bera, Dan J. Kim, "Investigating the Psychological Influence of phishing techniques and their Severity Affecting Likelihood of Phishing Attack" (Invited for "Revise and Resubmit" at Journal of Management Information Systems - JMIS)

Debalina Bera, Dan J. Kim and O. Ogbanufe, "Towards a Dimensional Framework of Fraudulent Emails: An Exploration of Psychological, Design Attack Tactics and Intentions" (Invited for "Revise and Resubmit" at Decision Support System - DSS)

Debalina Bera, Dan J. Kim, "The Interplay of Information Processing, Mindfulness, and Affective State in Phishing Detection" (In process of submission at Information Systems Research - ISR)

PUBLICATIONS

Journal and Conference Proceedings

1   **Bera, Debalina** and Kim, Dan J., "Uncovering Thematic Dimensions of Fraudulent Emails using Topic Modelling" (2021). AMCIS 2021 Proceedings. 14.
2   **Bera, Debalina,** Banihani Saad and Sadeghi J. Kiarash and Kim, Dan J., "Blockchain Technology for the Improvement of Patient Information Security" Bright Internet Global Summit (BIGS), Post-ICIS 2021, Austin, TX
3   **Bera, Debalina,** Sidorova Anna, Kim, Dan J., and Deepak Pravin, "Reviewing the Success of Blockchain Technology in Realms of Socio-Technical Cohesion", Bright Internet Global Summit (BIGS), Post-ICIS 2021, Austin, TX
4   **Bera, Debalina** and Kim, Dan J., "Uncovering Dimensions of Cyber Attacks Using Content Analysis on Fraudulent Emails", AIS SIGSEC WISP, Pre-ICIS 2021, Austin, TX
5   **Bera, Debalina** and Kim, Dan J. "An Insight into Social Media Continuance Use through Systematic Literature Review", 20th Pre-ICIS Workshop, e-Business (WeB2021)
6   **Bera, Debalina,** and Kim, Dan J. "DIGITAL RESILIENCE FORMATION BEFORE AND DURING PANDEMIC - A THEMATIC ANALYSIS IN HIGHER EDUCATION CONTEXT", 2021 Pre-ICIS SIGDSA Symposium, 11-12 December 2021.

7   **Bera, Debalina,** and Kim, Dan J. "Chronological evolution of social media: through Feature Push Utility Pull Framework", 2021 Pre-ICIS SIGDSA Symposium, 11-12 December 2021.
8   **Bera, Debalina** and Kim, Dan J., " The Interplay of Information Processing, Mindfulness, and Affective State in Phishing Detection Contact" (2022). AMCIS 2022 Proceedings. 15.

Invited Presentation
1   **Bera, Debalina,** and Koh, Chang "An Insight into Social Media's Continuance Use Phenomenon: Using Multi-Motive-Factors" SWDSI, 2019

SCHOLARSHIP & GRANT

2021-2022   Ryan College of Business/Information Technology Decision Science - Doctoral Scholarship ($750), University of North Texas
2021-2022   Ryan College of Business/Information Technology Decision Science - Charles Arnett Scholarship ($750), University of North Texas
2021   Toulouse Graduate Research Award, ($1000), University of North Texas

TEACHING EXPERIENCE

- Critical Thinking and Decision Making in Business (BCIS 3100), FA21, SP22
  Identify the business-critical problem, Develop, and examine alternatives/solutions, evaluate alternatives using data, information, assumptions, tangible and intangible cost-benefit analyses, and decision making using excel function, formulas, and basic statical analysis
- Visual Display of Business Information systems (BCIS 3615), FA20, SP21, SU21
  Recognize the strengths and weaknesses of various media for enhancing business communications: using Adobe Creative Cloud (CC) software (Photoshop, Audition, Acrobat) and Fanta Morph
- Basic Information Systems (BCIS 3610), SU22
  Understand information technology terms and concepts in the business environment, Know the structure (or components) of information technology, explain how information technology applies to business problems, understand general database concepts, understand how databases are used in the business and personal environments and know how to use a database management system
- Programming Languages for Business Analytics
  Businesses nowadays rely heavily on data to make informed decisions. Business analytics uses statistical and machine learning techniques to extract valuable information out of the large volume of data and to discover actionable insights in business contexts. Python is the most popular programming language for advanced business analytics. This course aims to teach how to perform business analytics tasks using Python. We cover basic programming concepts in Python and useful packages for business analytics such as NumPy, Pandas, Matplotlib, and ScikitLearn. Students learn to identify data-related business problems in today's information-rich environments and get hands-on Python programming to solve problems.

PROFESSIONAL SERVICE ACTIVITIES

- Journal/Conference Reviewer
  - Reviewer for AMCIS (2021)
  - Reviewer for WISP, PRE-ICIS (2021)
  - Reviewer for Electronic Commerce Research and Applications
- Professional Membership
  - Association for Information Systems (AIS)
  - Institute for Operations Research and The Management Sciences (INFORMS)
  - Decision Sciences Institute (DSI)

SYSTEM SKILLS

Professional Training
- Oracle PL/SQL Developer Certified Associate (OCA)- Program with PL/SQL - 1Z0-147
- International Software Testing Qualifications Board (ISTQB) Software Tester Certifications: Certified Tester - Foundation Level
- Exam 1Z0-007: Introduction to Oracle9i: SQL
- Exam 1Z0-001: Introduction to Oracle: SQL and PL/SQL

Technology Experiences
- Operating Systems: Unix, Linux, Macintosh operating systems, Windows NT, Windows XP/2000/ME/98/10/11
- Programming Languages: Python, JAVA, C, C++, Visual Basic, dot Net
- DBMS: DB2, Oracle RDBMS, MS SQL Server, PL-SQL, MS Access, SQL*Reports, SQL*Plus, SQL*Loader, TOAD, SQL Navigator, Query Surge
- Web Programming: XML, ASP, JavaScript, CGI Script, VB Script, PHP, and Flash MX
- Web Application Software: Jupyter Notebook, Apache Selenium IDE
- Graphic Tools: Visio Professional, Adobe Creative Cloud software -Photoshop, Audition, Acrobat, and Fanta Morph
- Statistical applications: SPSS, SAS, SmartPLS, R, Minitab, AMOS, PLS
- Project Management Tools: Microsoft VSTS, HP ALM, JIRA PM, Microsoft Project Plan, Rational Clear Quest, Team Foundation Server
- Software Testing Tools: Selenium WebDriver, Selenium RC, QTP/ HP –UFT 12.0, Microsoft Test Manager, Test Director, Quality Center/HP-ALM, Load Runner, Junit, TestNG, JIRA
- Technologies: ERP, Tableau, Eclipse, Toad, Rational Application Developer, Oracle 11g, Mainframe File Aid, Sap, SalesForce.com, Tibco

REFERENCES

Dan J. Kim, Ph.D.   **Gurpreet Dhillon, Ph.D.**
   Fulbright Sr. Scholar & Professor of   Professor

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Sciences G. Brint Ryan College of Business
University of North Texas
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GRADUATE COURSE WORKS

Management Information Systems

Decisions Support Systems
Human resource management system
System Analysis and Design
Enterprise resource planning
General System Theory
Quality Software Design
Block Chain Technology
Strategic Management of Information
Technology
Topics in Information System
Seminar in General System Theory

IT/Software Engineering

Software development process
Database Management System
Data Integrity, Performance Tuning, Security
and Recovery
Object oriented Programming
Java, Dot Net
Data Structure
Algorithms for computing, stack, queue,
array, linked list, binary tree
Programming Language
C, Python, SAS

Engineering Management

Operation Research and Optimization
Technique
Total Quality Management
Statistical process control
Probability and Statistics
Advanced Statistics Methods
Stochastic Methods
Social Statistics (Causal Models)
Organizational Behavior
Engineering Management
Project management
Lean Six Sigma
Quality Engineering using statistical process
control chart
Analysis of Engineering Economy
Time value of money
Capital financing to measure cost engineering

Business Analytics

Applied Regression Analysis
Applied Multivariate Statistical Concept
Big Data Analytics
Structural Equation Modelling
Advanced Multivariate Experimental design
Data Mining
Predictive Analytics
Linear Programming
Discrete Optimization
Simulation and Stochastic Models
Advanced Topics on Quantitative Methods
Design & Analysis of Experiment