Shikhar P. Acharya, Ph.D.
shikhar.acharya@untdallas.edu
UNT Dallas, School of Business
7300 University Hills Blvd
Room # 302; Founders Hall Building
Dallas, Texas 75241

Education

Missouri University of Science & Technology — Rolla, MO
Ph.D Systems Engineering — **Dec 2014**

Ace Institute of Management — KTM, Nepal
MBA in Finance — **Aug 2007**

Kathmandu University — KTM, Nepal
B.E. Computer Engineering — **Aug 2004**

Experience

University of North Texas at Dallas — Dallas, TX
Assistant Professor of Business Analytics — **Aug 21 - Current**
School of Business

Teaching

- Teaching various in-person, internet (online synchronous) and completely online (online asynchronous) undergraduate courses
    1. BCIS 3305 – Spreadsheet Data Analysis
    2. BCIS 3615 – Visual Display of Business Information
    3. DSCI 3305 – Business Statistics II
    4. DSCI 3310 – Data Interpretation and Storytelling
    5. DSCI 3380 – Fundamentals of Business Analytics
    6. DSCI 3870 – Management Science – I
    7. DSCI 4310 – Predictive Modelling
    8. DSCI 4320 – Big Data Management and Retrieval
    9. DSCI 4390 – Applied Business Analytics
    10. DSCI 4510 – Data Analytics Programming
    - Courses Designed (from the list above)
        - BCIS 3305 – Spreadsheet Data Analysis
        - DSCI 4390 – Applied Business Analytics
    - Course restructured and significantly modified/improved (from the list above)
        - BCIS 3615 – Visual Display of Business Information
        - DSCI 3380 – Fundamentals of Business Analytics
        - DSCI 4310 – Predictive Modelling

Research

1. Received a grant of $14,500 by The Center for Socioeconomic Mobility Through Education (CSME) and I am currently working on it. The title of the grant proposal is ‘A Comparative Socioeconomic Analysis of Surrounding Area of UNT Dallas Community’.

2. Refereed Presentations
    i. Acharya, S. P., & Maskay, B. K., (2020) Predicting The Number Of Deliveries In A Fast Food Restaurant, INFORMS annual meeting, online, November 8-11, 2020
    ii. Acharya, S. P., & Maskay, B. K., (2022) Examining the Reliability of Airline On-Time Performance Data using Newcomb Benford's Law, 2022 International Conference on Management, Leadership and Business Intelligence, Dallas, Texas, April 01

Service

1. Member: Faculty Worklife Committee
   Worked as a member of faculty worklife committee for the year 2021-22.

   Worked as search committee member of
2. Lecturer of Business Information Systems and Decision Science Fall or Spring 2022 position

3. Lecturer of Business Information Systems/Analytics - Fall 2022 position

4. Worked with Dr. Cathy Scott and Dean Dr. Karen Shumway in revising business analytics program

5. Served as the Conference Session Chair of 'The 2022 International Conference on Management, Leadership and Business Intelligence' held at UNT Dallas on April 1, 2022.

Loras College — Dubuque, IA
Assistant Professor of Business Analytics — **Aug 17- Aug 21**
Francis J. Noonan College of Business

Teaching

- Taught, co-taught and designed various on-campus and online undergraduate and graduate level Analytics courses:

  Undergraduate courses:
  1. BAN 210 – Essentials of Analytics
  2. CIT 221 – Data Analysis
  3. BUS 250 – Business Statistics
  4. BAN 300 – Applied Analytics (combined with BAN 490 – Discovery in Analytics
  5. BAN 320 – Predictive Modelling
  6. CIT 485 – Systems Engineering
  7. BAN 397 – Independent Studies

Graduate courses:

8. MBA 530 – Programming with Analytics Methods (combined with MBA 581 – Capstone Seminar)
9. MBA 509 – Big Data Ecosystem

Course designed:

10. DAT 200 – Introduction to Programming for Analytics Methods

Divisional Services

- Member – Finance faculty search committee
- Advised >10 students each semester
- Revised the program learning outcome for the Analytics Program and updated the sample 4 year plan for Business Analytics. Worked on mapping the program learning outcomes to institutional learning outcomes, assessment of the Analytics Program, and assessment of various courses
- Attended various meetings and initiatives related to restructuring of the Analytics Program including Academic Council meetings.
- Represented Analytics Program in Majors Fairs and Analytics Advisory Committee

Institutional Services

- Member – Interfaith Strategic Planning Committee – Fall 2019 – Aug 2021
- Secretary – Assessment Committee – Fall 2017 – Spring 2018

Scholarship of Application and Community Engagement

I mentor students to apply their skills to solve real world problems. I collaborated with the institutional divisions, external organizations and research teams to create analytics projects for the students. Students interacted with their clients, worked on the data provided to them and made presentations to clients about their findings. Some of the institutions I collaborated with are as follows:

- Office of Institutional Research, Loras College
- Analysis of Community Perception Survey conducted by Greater Dubuque Development Corporations
- 7 Hills Brewing Company, Dubuque IA
- Social and Religious Climate Research Team of Dr. John Eby, Loras College
- Opening Doors Homeless Shelter, Dubuque IA
- Office of Institutional Advancement, Loras College

I was faculty advisor to a team who presented to the undergraduate program student research showcase in the 2019 Legacy Symposium. The title of their work is 'First Year of 7 Hills Brewing Company: A Data Centric Analysis'.

University of South Florida — Tampa, FL
Visiting Instructor — **Aug 15 - July 17**
Industrial and Management Systems Engineering

- Taught three courses each semester: ESI6247-Statistical Design Models; EGN4450-Introduction to Linear Systems; EGN3443-Probability & Statistics for Engineers; ESI4620-Design of Industrial Information Systems; ESI3615-Engineering Economics; and EGN3000L-Foundations of Engineering Lab
- Lectured and managed large size classes with up to 200 students
- Taught hybrid classes with up to 40 students at distance (online students)
- Supervised and administered 2-5 Teaching Assistants and Graders each semester
- Implemented MATLAB, MS Access, SQL and Excel in the lectures
- Contributed to research efforts of the college by providing service as the research poster presentation judge
- Served as an advisor of Nepalese Student Association at USF (NESA)
- Collaborated with faculty in other colleges for research projects and lectured as guest lecturer each semester
- Provided academic advising to up to 12 engineering students per semester

Missouri Western State University — St. Joseph, MO
Assistant Professor of Business Statistics — **Dec 14-May 15**

- Taught Business Statistics courses: Business Statistics I (GBA 210) and Business Statistics II (GBA 310)
- Created and adapted syllabus as per student needs
- Implemented the statistical concepts on SPSS and Excel
- Provided academic advising and mentoring to students
- Graded assignments and provided feedback as needed
- Contributed to ABET accreditation by providing suggestions to course committe

Missouri University of Science & Technology — Rolla, MO
Course Instructor — **Aug 13-Dec 14**

- Worked as course instructor for EMGT 134 – Managing Engineering and Technology
- Created course syllabus, course materials, assignments, quizzes, class projects, and exams
- Received the **Outstanding Graduate Student Teaching Award** based on student evaluations

Missouri University of Science & Technology Rolla, MO
Research Assistant-Smart Engineering Systems Lab **Jan 09-Aug 13**

- Completed various data mining and data analysis projects as part of research and course requirements in MATLAB, R, and, SAS
- Applied Hidden Markov Model, Principal Components Analysis, Support Vector Machine to detect malicious electronic devices using their unintended electromagnetic emissions
- Developed a novel way of assessing the risk of a project by analyzing interactions between systems requirements
- Published peer reviewed publications and gave one invited talk
- Collaborated with other researchers in research projects

Missouri University of Science & Technology Rolla, MO
Program Manager for DoD funded RT-19 project **Aug 10-May 13**

- Managed a team of 4-5 students each semester
- Prepared teams to conduct three design reviews and evaluations that included Conceptual Design Review, Preliminary Design Review, and Detailed Design Review
- Divided and assigned tasks to team members as per their expertise
- Acted as a liaison between student team and other stakeholders such as customer, Boeing mentors, technical experts, and faculty advisors

Missouri University of Science & Technology Rolla, MO
Teaching Assistant **Aug 10-Dec10**

- Worked as teaching assistant for the course Introduction to Operations Research Eng Mgt 382
- Taught topics like linear programming, sensitivity analysis, duality theory and graded assignments and kept track of student records

Algorithms	Neural Networks		SVM		Decision Trees
	Principal Component Analysis		Regression Analysis		ANOVA
	Hidden Markov Models		Clustering Algorithms		Association Rules
Computer Skills	R	Matlab	Mathematica	SAS	Python
	ARENA	Minitab	SQL	LaTeX	HTML
	Microsoft Access		Python	VBA	C/C++
	JMP				

Publications

Kayani, W., Acharya, S. P., Guardiola, I. G., Wunsch, D. C., Schumacher, B., & Wagner-Muns, I. (2016). Shape Analysis of Traffic Flow Curves Using a Hybrid Computational Analysis. *Procedia Computer Science*, *95*, 457-466.

Bonnie Bachman, Shikhar Acharya, Margaret Baumann, Shristy Bashyal, "*Corporate Sustainability Practices in the Plastics Industry*", Polimeri: časopis za plastiku i gumu 35.1-2: 25-28, 2015

Shikhar Acharya, Bonnie Bachman, and Shristy Bashyal, "*A Study on the Relationship between the Size of the Company and It's Sustainability Spending in the Plastics Industry*," ANTEC 2015, March 23-25, 2015.

W. Kayani, S. Acharya, I. Guardiola, D. Wunsch, B. Schumacher. "*A Hybrid of Computational Intelligence Techniques For Shape Analysis Of Traffic Flow Curves*," Transportation Research Record series, Journal of the Transportation Research Board, 2015

Acharya, S. P. (2015). *Detection and recognition of R/F devices based on their unintended electromagnetic emissions using stochastic and computational intelligence methods*.

Shikhar Acharya, Ivan Guardiola, *"Detection and Recognition of RF Devices using Support Vector Machine"*, International Journal of Interdisciplinary Telecommunications and Networking, volume 4.4, 2013

Shikhar Acharya, Ivan Guardiola, "*Identification of RF devices based on their unintended electromagnetic emissions using principal components analysis",* 12th Annual Wireless Telecommunications Symposium 2013

Shikhar Acharya, Ritesh Arora, Ivan Guardiola, *"Application of Stochastic Modelling in Identifying Malicious Devices through Unintended Emissions"*, Telecommunications Cluster, INFORMS annual meeting, Charlotte, North Carolina, November 13-18, 2011

Shikhar Acharya, Ritesh Arora, and Ivan G. Guardiola *"System for Detection of Malicious Wireless Device Patterns"* Procedia Computer Science: 345-350, 2012

Shikhar P. Acharya and Ivan G. Guardiola, *"Requirements Dependency Factor as a Requirements Evaluation Metrics"* in Intelligent Engineering Systems through Artificial Neural Networks, Volume 20, ASME Press, New York, NY (2010)

Presentations

Presented at Intelligent Engineering Systems through Artificial Neural Networks, St. Louis, 2010, *Requirements Dependency Factor as a Requirements Evaluation Metrics*

Presented at Conference on Systems Engineering Research, St. Louis, 2012, *System for Detection of Malicious Wireless Device Patterns*

Presented at INFORMS Annual Meeting, Charlotte, 2011, *Application of Stochastic Modelling in Identifying Malicious Devices through Unintended Emissions*

Presented at 12th Annual Wireless Telecommunications Symposium, Phoenix, 2013, *Identification of RF devices based on their unintended electromagnetic emissions using principal components analysis*

Awards & Activities

Secretary – Assessment Committee at Loras College (Aug 17 - Present)
Nepalese Student Association USF-Advisor (Aug 15 - July 17)
Panelist – New Faculty Orientation 2016 – ATLE, USF
9th Annual College of Engineering Research Day- Faculty Judge
Outstanding Graduate Student Teaching Award, Missouri S&T
Participations at various poster competitions