## Robert P. Schumaker

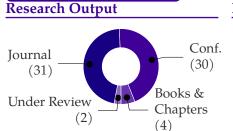
Professor - University of Texas at Tyler - Director - Data Analytics Lab

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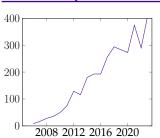
## Research Highlights



#### **Research Metrics**



#### Citations by Year

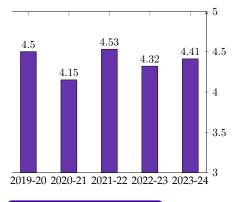


## Teaching Highlights

**Overall Teacher Evaluation** 

$(\bar{x} = 4.25, \sigma = 0.46, n = 173)$					
0	1	2	3	4	5

## **Evaluations in the Last 5 Years**



## Courses in the Last 5 Years (Num. / Rating)

COMIDED III VIII ZWO	7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Bus. Intelligence	<b>4.16</b>
eCommerce	<b>4.27</b>
Intro to IS	<b>••••••••• 4.42</b>
Machine Learning	4.58
Quant. Investing	<b>• • • • • • • • • • • •</b> 4.96
Research Methods	<b>4.70</b>
Sports Analytics	<b>4.73</b>
Text Analytics	<b>• • • • • • • • • • 3.77</b>
Systems Analysis	4.46
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### **Teaching Interests**





## Award Highlights



#### **Pirtle Endowed Professorship**

The George W. and Robert Pirtle Endowed Professorship is a three year endowed professorship that is awarded to an outstanding Assistant or Associate Professor in the Soules College of Business.



#### **Crystal Quill Award**

The Crystal Quill Award is an annual award given in recognition of an outstanding Soules College of Business faculty member based on their research.



#### Hall of Honor Gold Award

The Hall of Honor Gold Award is an annual award given in recognition of an outstanding CCSU School of Business faculty member based on their research.



#### **IIMA Fellow**

The Fellow Award is the International Information Management Association's highest award in recognition of outstanding teaching, research and service to the organization.

## Preparation and Experience

## Academic Preparation



## The Eller College of Business - University of Arizona

Doctor of Philosophy (Ph.D.)

**A**pril 2007

Tucson, Arizona

- Major: Management of Information Systems
- Minor: Computational Linguistics
- Dissertation: Knowledge Acquisition, Delivery and Prediction through Text Mining
- Advisor: Hsinchun Chen





## College of Business Administration - University of Akron

Masters of Business Administration (MBA)

**M**ay 2001

Akron, Ohio

• Major: Management

• Minor: International Business





#### College of Engineering - University of Cincinnati

Bachelor of Science (B.S.)

**i** Iune 1997

Cincinnati, Ohio

• Major: Civil Engineering

• Minor: Transportation Engineering

## Professional Experience



#### Soules College of Business - University of Texas at Tyler

Professor - Computer Science Department

Fall 2015 - Present

**▼** Tyler, Texas

#### Research



## **Healthcare Informatics**

In this domain of study we mine publicly available adverse reaction data using machine learning tools to predict health severity and the patient factors leading to them.

## Major Findings from the Data Analytics Lab

- 11% of COVID-19 vaccine reactions are patients with penicillin and sulfa drug allergies
- Women are 2.9x more likely to have an adverse reaction to COVID-19 vaccines
- For allergy sufferers, the Janssen vaccine has the lowest hospitalization rate
- The drug combination lumiliximab, cyclpphosphamide, fludarabine and rituxmab is correlated with 100% patient mortality



Mining relevant data from Sports-related sources and producing predictions can provide an edge to sports organizations and gamblers alike. In this series of studies we create a system to collect and analyze the sentiment content of tweets to use as a predictive mechanism for game outcomes in English Premier League soccer, the NFL, MLB, NBA, NHL and Major League Soccer.

## Major Findings from the Data Analytics Lab

- Sports Wagering markets and Stock Markets share a lot in common for prediction
- Using Twitter sentiment on NFL games led to a 14.8% abnormal return
- Using Twitter sentiment on EPL games led to a 16.5% abnormal return
- Tweeters from the English Premier League Club of Sunderland are not nice people

## ~

#### **Textual/Financial Prediction**

In this series of studies we extend the Textual/Financial Prediction work. With our system we investigate the 1. role of sentiment position within financial text, how it relates to market psychology and ultimately data-mined price prediction, 2. how to leverage the machine-learned relationships of financial news articles to stock price movement and present a new financial tool of Press Release Manipulation whereby firms can manage their stock price via choosing when to release press releases, careful term selection based on historical price movements and selection of media outlets that have historically had the most positive price impact and 3. investigate textual consumer feedback and how it relates to stock price.

#### Teaching

- Business Intelligence and Analytics
- Capstone
- Database
- Data Communications and Computer Networks
- Design of Modern Information Systems
- eCommerce
- ERP Architecture using SAP
- Machine Learning
- Management Information Systems
- Microsoft Office
- Programming
- Quantitative Investing
- Sports Data Analytics
- Systems Analysis and Design
- Text Analytics

#### Items of Interest

- Promoted to Professor, 2019
- Received tenure, 2018
- Awarded the George W. and Robert Pirtle Endowed Professorship in Business, 2016-2019
- Founded the Data Analytics Lab, 2015





#### School of Business - Central Connecticut State University

Associate Professor - Management Information Systems Department

**Fall 2012 - Summer 2015** 

New Britain, Connecticut

#### Research



#### **Textual/Financial Predition**

In this study we created the CentralFinance system, the next-generation and radical transformation of the successful AZFinText textual/financial prediction engine. With CentralFinance we investigated a new financial tool of Press Release Manipulation whereby firms can manage their stock price via choosing when to release press releases, careful term selection based on historical price movements and selection of media outlets that have historically had the most positive price impact.



#### **Sports Analytics**

In this series of studies we created the CentralSport system to analyze sentiment content of tweets to use as a predictive proxy for match outcomes in English Premier League soccer.

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## Teaching

- Business Information Systems
- eCommerce
- Managing the IT Value Proposition



## Monte Ahuja College of Business - Cleveland State University

Visiting Assistant Professor - Computer & Information Systems Department

Fall 2010 - Summer 2012

♥ Cleveland, Ohio

#### Research



#### Textual/Financial Prediction

A further continuation of prior textual financial research, this project utilizes the Arizona Financial Text System (AZFinText) to represent financial news articles and make trades based on the terms contained within them. This variation of the project examines different linguistic representational models and evaluates their predictive results to market trading activity.



#### **Sports Analytics**

This stream of research investigated the accuracy, profitability and betting efficiency of wager prediction markets in greyhound and harness track racing.

#### **Teaching**

- Business Information Systems
- Database
- Programming
- Microsoft Office
- Security





#### LaPenta School of Business - Iona College

Assistant Professor - Information Systems Department

**F**all 2007 - Summer 2010

New Rochelle, New York

### Research



#### **Textual/Financial Prediction**

Textual/Financial Prediction A continuation of the AZFinText studies, this project examines the relationship between financial news articles and their impact on stock market prices. Prediction is made utilizing various textual representation schemes, price prediction models and machine learning techniques to accomplish profitability in extreme near-term trading. Based on the premise that unexpected news events can shape the price of a stock, we capitalize on automatically identifying the relevant keywords in the news article and then execute a trade well-before human traders have a chance to read the news article.

#### **Teaching**

- Business Information Systems
- Data Mining
- Internet Applications
- Network Construction
- Quantitative Investment
- Telecommunications





#### The Eller College of Business - University of Arizona

Research Associate - Artificial Intelligence Lab

**a** Fall 2003 - Spring 2007

Tucson, Arizona

#### Research



#### **Textual/Financial Prediction**

Known as AZFinText, this project examines the relationship between financial news articles and their impact on stock market prices. Prediction is made utilizing various textual representation schemes, price prediction models and machine learning techniques to accomplish profitability in extreme near-term trading. Based on the premise that unexpected news events can shape the price of a stock, we capitalize on automatically identifying the relevant keywords in the news article and then execute a trade well-before human traders have a chance to read the news article.



#### Question Answer Systems

The AZ-ALICE and TARA chatterbot experiments were an exploration into the potential of using natural language chatterbots as conversational entities. These two studies, AZ-ALICE in Fall 2003 and TARA in Spring/Summer 2004, were built on the proven ALICE chatterbot engine (www.alicebots.org). In the AZ-ALICE experiment we tested a limited telecommunications knowledge set to see how well the chatterbot could respond to telecommunications-related questions. The TARA studies went one step further and analyzed a substantial terrorism knowledge base that was automatically gathered from the Internet. From our experiments we found several interesting facets. The most important of which was the discovery that adding more knowledge to the system actually harmed the quality of responses.

#### **Teaching**

Business Information Systems





## College of Business Administration - University of Akron

Instructor - Dept of Accountancy

**Fall 2000 - Summer 2003** 

Akron, Ohio

#### Teaching

- Business Information Systems
- Microsoft Office

## Industry Experience



#### sentiSports

Co-Founder and Chief Technical Officer

**2**015 - 2016

New Britain, Connecticut

- sentiSports is a subscription-based service that provides sentiment analysis of sports matches to media, odds-makers and individuals in real-time
- Responsible for the technical details, system building, cloud services





## The Schumaker Foundation Inc.

President and Founder

**2**008 - 2012

Derby, Connecticut

- The Schumaker Foundation is a 501(c)(3) public non-profit charity that is dedicated to providing financial scholarships to exceptional students in both Divinity and Information Systems fields.
- Organized, founded and brought forth a new avenue of assistance to serve a demographic subset not typically served
- Responsible for all aspects of the Foundation's business including incorporation, taxation, day-to-day activities, strategic vision, website design, presiding over board meetings, etc.



#### **Shaker LaunchHouse**

Mentor

**2011 - 2012** 

Shaker Heights, Ohio

• The Shaker LaunchHouse is a business incubator that services the Northeastern Ohio region. Portfolio companies are developed and grown at the advice and investment of the organization.





#### Information Systems Dept. - Iona College

Director of the IS Dept. Computer Lab

**Sept 2007 - Aug 2010** 

New Rochelle, New York

- Initiated and implemented a student assistant training program to handle daily operations
- Modernized an aging facility with state of the art computers, servers and networking equipment
- Instrumental for creating student and faculty demand for the lab





#### CBA Computer Labs - University of Akron

Computer Lab Manager

**i** Jan 2001 - March 2002

Akron, Ohio

- Instrumental in modernizing operations by embracing the complete paperless office concept
- Created a networked scheduling program to handle the student demand for lab equipment
- Raised efficiencies by developing models to provide instant data on all aspects of operations
- Initiated and implemented an online student assistant training program with hands-on objectives





#### **CBA Computer Labs - University of Akron**

Interim Director of Technology

- **d** Aug 2000 Jan 2001
- Akron, Ohio
- Responsible for the overall development and technology needs of the college
- Assertively trained Lab Assistants to handle incredibly complex computer-related problems
- Took an aggressive initiative in replacing 1/3 of the lab computers and servers
- Handled daily operations and set into motion a long term strategic plan addressing future needs





#### Schumaker Hardware Inc.

Vice President

- **1**997 2007
- Baltic, Ohio
- Responsible for day to day operations across all facets of operation
- Integral in expanding physical store selling area by 150%
- Wrote a neural network algorithm to analyze and predict sales given historical knowledge
- Created an inventory control program that reduced inventory counts from weeks to days

## Certifications and Licenses

- Amateur Radio License Amateur Extra (AI5U), December 2020
- Amateur Radio License Amateur Extra (KI5KRE), September 2020
- Analytical Aptitude Assessment (Aryng), October 2017
- CompTIA Security+ Certification (SY0-401), May 2015 May 2018
- CompTIA Network+ Certification (N10-005), March 2015 May 2018
- SAP Certified Business Associate with SAP ERP 6.5 (C\_TERP10\_65), May 2013
- Amateur Radio License General Class (KC1AFF), November 2010
- Amateur Radio License Technician Class (KD8OYN), November 2010
- Fundamentals of Engineering Exam (FE), May 1997

## Technical Skills

- Database: Microsoft SQL Server, mySQL, Oracle
- Cloud Providers: Microsoft Azure and Amazon AWS
- ERP Systems: SAP
- Live Streaming: YouTube Studio, OBS Studio, Teams, Zoom
- Operating Systems: Windows eco-system, Linux Mint, Ubuntu
- Programming and Scripting: html, Java, .Net, Php, R, t-SQL, VBA
- Project Management: Asana
- Video Creation: 4K Download, Cheese, DroidCam, Kdenlive, OBS Studio
- Have actively taught expert levels of MS Office
- Have written several Android applications

## LinkedIn Skill Assessment Badges

• *Machine Learning*: March 25, 2022

- mySQL: March 25, 2022
- Cybersecurity: March 24, 2022

## Continued Study

## Teaching Workshops

- November 2022 University of Texas at Tyler, Canva for the Innovative Classroom, 1 hour
- March 2022 *University of Texas at Tyler*, What is Innovation in the Classroom (Web), 1.5 hours
- November 2021 TED Radio Hour, Teaching for Better Humans, 1 hour
- October 2021 YouTube, Top Tech Tools for Teachers in 2021 (Web), 0.5 hours
- February 2020 YouTube, How to Live Stream, Step by Step Using OBS (Web), 0.5 hours
- January 2020 YouTube, Best Apps for Teachers in 2020 (Web), 0.5 hours
- January 2020 YouTube, Teaching Without Walls: 10 Tips for Online Teaching (Web), 0.5 hours
- October 2018 University of Texas at Tyler, Leading and Lagging Student Indicators, 1 hour
- October 2018 *University of Texas at Tyler*, SeekUT, 1 hour
- September 2017 TEDxSantoDomingo, What Makes a Good Teacher Great? (Web), 0.5 hours
- September 2017 TEDxLayfayette, Teaching Methods for Inspiring Students (Web), 0.5 hours
- April 2017 University of Texas at Tyler, Undergraduate Research Town Hall (Web), 1.5 hours
- February 2017 University of Texas at Tyler, Team Based Learning (Web), 1 hour
- February 2017 University of Texas at Tyler, Canvas LMS, 2 hours
- November 2016 University of Texas at Tyler, Actively Engaging Students (Web), 1.5 hours
- February 2016 *University of Texas at Tyler*, Service Learning, 1 hour

## Technical Training and Workshops

- July 2023 YouTube, Kdenlive Tutorials, 3 hours
- March 2022 *Udemy*, mySQL High Performance Tuning Guide, 3 hours
- March 2021 IEEE, Ask the Experts: An Open Discussion with 3 Independent Consultants, 1 hour
- October 2020 YouTube, Raspberry Pi Projects 2020, 0.5 hours
- May 2020 AMIA, Meaningful Potential Drug-Drug Interactions COVID-19, 1 hour
- February 2020 IEEE ComSoc Region 1, Workshop on AI/ML in Networks and Cloud, 8 hours
- October 2019 YouTube, Asana Project and Team Management, 0.5 hours
- October 2019 Slack, Being a Slack Admin, 1 hour
- October 2018 Western Mass Stats and Data Science, EHR data for Predictive HIV Care, 1 hour
- August 2018 icABCD 2018, Big Data Workshop, 1 hour
- June 2018 Western Mass Stats and Data Science, A Short Tour of Cardio Biostatistics, 1.5 hours
- May 2018 YouTube, Intro. Tutorial On How To Use Slack For Team Communication, 0.5 hours
- September 2017 IIMA 2017, Perception Data Workshop (Tableau), 2 hours
- July 2017 AILA 2017, Corpus Linguistics: Introduction to Multi-Dimensional Analysis, 1 hour
- March 2017 SSAC 2017, Concession Analytics, 1 hour
- January 2017 University of Texas at Tyler, Advanced Statistical Analyses, 2 hours
- December 2016 CT Predictive Analytics, ElasticSearch + Logstash + Kibana, 2 hours
- October 2016 University of Texas at Tyler, OpenStack Cloud Computing Workshop, 12 hours
- September 2016 IIMA 2016, How to Attack Android in 10 Seconds or Less, 4 hours
- May 2016 Tableau, Data Science for All: A University-Wide Course in Data Analytics, 1 hour
- December 2015 ICIS 2015, SIGBPS 2015 Workshop on Big Data and E-Commerce, 8 hours
- March 2015 Greater Hartford ACM Chapter, Apache Hadoop Workshop, 8 hours

## R (Statistical Computing Programming Language)

- April 2022 *Udemy*, Building Interactive Apps with Shiny and R, 2 hours
- November 2020 YouTube, Going Deeper with Dplyr: New Features in 0.3 and 0.4, 1 hour
- November 2020 YouTube, Hands-on Dplyr Tutorial for Faster Data Manipulation in R, 1 hour

- October 2020 YouTube, 10 R Packages You Should Know in 2020, 0.5 hours
- March 2017 SSAC 2017, Scraping and Analyzing NFL Data with R, 1 hour
- March 2015 Univ, of Massachusetts Amherst, Intro to R Workshop, 2 hours
- March 2015 Amherst College, Accessing Bigger Datasets Using SQLite in R, 2 hours
- March 2015 Amherst College, Working with Geographic Data in R, 2 hours

## SAP Training

- July 2021 HEC Montreal, ERP Simulation Level 2, Online
- June 2013 HEC Montreal, ERP Simulation Level 1, 4 days
- May 2013 Georgia Southern University, Terp10 Training, 10 days
- February 2013 University of Wisconsin Milwaukee, Business Analytics and SAP HANA, 2 days
- January 2013 Sam Houston State University, Introduction to SAP, 4 days

## Post Baccalaureate

• Spring 2003 - Univ. of Akron, Artificial Intelligence and Heuristic Programming

## Membership in Professional Societies

- Senior Member Association for Computer Machinery (ACM)
- Member Association for Information Systems (AIS)
- Member- Decision Sciences Institute (DSI)
- Senior Member Institute of Electrical and Electronics Engineers (IEEE)
- Past-President, Fellow International Information Management Association (IIMA)
- Member ISTA Council for Sports Technology Education
- Member Society of Sports Knowledge Engineering (SSKE)

## Awards and Honors

- 2024, CETL Innovation in Teaching Award
- 2016-2019, George W. and Robert Pirtle Endowed Professorship in Business
- 2018, Crystal Quill Award for Outstanding Soules College of Business Faculty
- 2015, CCSU Hall of Honor Gold Award for Research
- 2014, IIMA Fellow
- 2014, IEEE Senior Member
- 2014, Phi Taus Under Forty Award
- 2013, ACM Senior Member
- 2012-2019, Sports Data Mining book in Top 25% of Springer eBook sales
- June 2010, Second most downloaded paper in ACM TOIS
- 2009, CELTIC Excellence in Teaching Award
- 2003, Induction into Sigma Iota Epsilon, Honorary Management Fraternity

## Research

## Publications

## Journal Articles

- 1. Vega, L., Conneen, W., Veronin, M. and **Schumaker, R.**, (2024). A Neural Network Approach to Predicting Opioid Abuse Using Patient Diagnosis and Prescription History. *PLOS One*. Forthcoming.
- 2. **Schumaker, R.**, Veronin, M., Rohm, T., Boyett, M. and Dixit, R., (2021). A Data Driven Approach to Profile Potential SARS-CoV-2 Drug Interactions Using TylerADE. *Journal of International Technology and*

- *Information Management.* 30(3)
- 3. Veronin, M., **Schumaker**, R., Dixit, R., Dhake, P., Mason, D. and Ogwo, M., (2020). A Systematic Approach to Cleaning of Drug Name Records in the FAERS Database. *International Journal of Big Data Management*. 1(2):105-118
- 4. Veronin, M., **Schumaker**, **R.** and Dixit, R., (2020). The Irony of MedWatch and the FAERS Database: An Assessment of Data Input Errors and Potential Consequences. *The Journal of Pharmacy Technology*. 36(4)
- 5. Lara, J., de Sojo, A., Aljawarneh, S., **Schumaker, R.** and Al-Shargabi, B., (2020). Developing Big Data Projects in Open University Engineering Courses:Lessons Learned. *IEEE Access*. 8(1):22988-23001 SJR Impact Factor at publication: 0.59 (Computer Science)
- 6. Aljawarneh, S., Bayat, O., Lara, J. and **Schumaker, R.**, (2020). Machine Learning Designs, Implementations and Techniques. *IEEE Access*. 8(1):120548-120552
  - SJR Impact Factor at publication: 0.59 (Computer Science)
- 7. Veronin, M., **Schumaker**, **R.**, Dixit, R. and Elath, H., (2019). Opioids and Frequency Counts in the US Food and Drug Administration Adverse Event Reporting System (FAERS) Database: A Quantitative View of the Epidemic. *Drug*, *Healthcare and Patient Safety*. 2019(11):65:70
  - SJR Impact Factor at publication: 0.47 (Pharmacy)
- 8. Veronin, M. and **Schumaker, R.**, (2019). Opioid Adjunct Drug Therapy: Evaluating Effectiveness Using Text Analytics of Real World Data. *Communications of the International Information Management Association*. 17(1)
- 9. **Schumaker, R.**, Maida, N., (2018). A Descriptive Analysis of Abnormal Stock Price Movement Following Financial News Article Release. *Communications of the International Information Management Association*. 16(1)
- 10. **Schumaker, R.,** (2018). Machine Learning the Harness Track: A Temporal Investigation of Race History on Prediction. *Journal of International Technology and Information Management*. 27(2)
- 11. Labedz Jr, C. and **Schumaker, R.**, (2018). What do Publicly Available Soccer Match Data Actually Tell Us. *Communications of the International Information Management Association*. 16(3)
- 12. **Schumaker, R.**, Labedz Jr., C., Brown, L. and Jarmoszko, A. T., (2017). Prediction from Regional Angst A Study of NFL Sentiment in Twitter Using Stock Market Charting. *Decision Support Systems*. 98(6):80-88 SJR Impact Factor at publication: 1.66 (Information Systems)
- 13. **Schumaker, R.**, Jarmoszko, A. T. and Labedz Jr., C., (2016). Predicting Wins and Spread in the Premier League Using a Sentiment Analysis of Twitter. *Decision Support Systems*. 88(8):76-84
  - SJR Impact Factor at publication: 1.72 (Information Systems)
- 14. Grenier, E., Fair, C. and **Schumaker, R.**, (2014). Social Media Is it a Valid Source for Creating New Business?. *Journal of Creative Communications*. 9(2):147-159
  - SJR Impact Factor at publication: 0.1 (Communication)
- 15. **Schumaker, R.** and Reganti, K., (2014). Implementation of Electronic Health Record (EHR) System in Healthcare Industry. *International Journal of Privacy and Health Information Management*. 2(2):57-71
- 16. **Schumaker, R.,** (2013). Data Mining the Harness Track and Predicting Outcomes. *Journal of International Technology and Information Management*. 22(2):103-107
- 17. **Schumaker, R.,** (2013). Machine Learning the Harness Track- Crowdsourcing and Varying Race History. *Decision Support Systems.* 54(3):1370-1379

- SJR Impact Factor at publication: 1.50 (Information Systems)
- 18. **Schumaker, R.**, Zhang, Y., Huang, C. and Chen, H., (2012). Evaluating Sentiment in Financial News Articles. *Decision Support Systems*. 53(3):458-464
  - SJR Impact Factor at publication: 1.54 (Information Systems)
- 19. **Schumaker, R.**, (2011). From Data to Wisdom- The Progression of Computational Learning in Text Mining. *Communications of the International Information Management Association*. 11(1):39-48
- 20. **Schumaker, R.**, (2010). Analyzing Parts of Speech and their Impact on Stock Price. *Communications of the International Information Management Association*. 10(3):1-10
- 21. **Schumaker, R.** and Chen, H., (2010). A Discrete Stock Price Prediction Engine Based on Financial News. *IEEE Computer*. 43(1):51-56
  - SJR Impact Factor at publication: 0.86 (Computer Science)
- 22. **Schumaker**, **R.** and Chen, H., (2010). Interaction Analysis of the Alice Chatterbot: A Two-Study Investigation of Dialog and Domain Questioning. *IEEE Transactions on Systems, Man, and Cybernetics-Part A: Systems and Humans*. 40(1):40-51
- 23. **Schumaker, R.** and Chen, H., (2009). Textual Analysis of Stock Market Prediction Using Breaking Financial News- The AZFinText System. *Association for Computing Machinery Transactions on Information Systems*. 27(2)
  - SJR Impact Factor at publication: 0.80 (Information Systems)
- 24. **Schumaker, R.**, Solieman, O. and Chen, H., (2009). Sports Knowledge Management and Data Mining. *Annual Review of Information Science and Technology*. 44
  - SJR Impact Factor at publication: 1.43 (Information Systems)
- 25. **Schumaker, R.** and Chen, H., (2009). A Quantitative Stock Price Prediction System based on Financial News. *Information Processing and Management*. 45(5):571-583
  - SJR Impact Factor at publication: 0.97 (Information Systems)
- 26. **Schumaker**, **R.** and Johnson, J., (2008). An Investigation of SVM Regression to Predict Longshot Greyhound Races. *Communications of the International Information Management Association*. 8(2):67-82
- 27. **Schumaker, R.** and Chen, H., (2008). Evaluating a News-Aware Quantitative Trader- The Effects of Momentum and Contrarian Stock Selection Strategies. *Journal of the American Society for Information Science and Technology*. 59(2):247-255
  - SJR Impact Factor at publication: 1.45 (Information Systems)
- 28. **Schumaker, R.** and Chen, H., (2007). Leveraging Question Answer Technology to Address Terrorism Inquiry. *Decision Support Systems*. 43(4):1419-1430
  - SJR Impact Factor at publication: 1.27 (Information Systems)
- 29. **Schumaker, R.**, Liu, Y., Ginsburg, M. and Chen, H., (2007). Evaluating the Efficacy of a Terrorism Question Answer System- The TARA Project. *Communications of the Association for Computing Machinery*. 50(7):74-80
  - SJR Impact Factor at publication: 1.30 (Computer Science)
- 30. **Schumaker, R.**, Liu, Y., Ginsburg, M. and Chen, H., (2006). Evaluating Mass Knowledge Acquisition using the ALICE Chatterbot. *International Journal of Human-Computer Studies*. 64(11):1132-1140
  - SJR Impact Factor at publication: 1.04 (Computer Science)

31. **Schumaker, R.**, Ginsburg, M., Chen, H. and Liu, Y., (2006). An Evaluation of the Chat and Knowledge Delivery Components of a Low-Level Dialog System- The AZ-ALICE Experiment. *Decision Support Systems*. 42(4):2236-2246

SJR Impact Factor at publication: 0.95 (Information Systems)

## Papers Under Review

- 1. Prince, M., Veronin, M. and **Schumaker, R.**, Prediction of Unknown Drug Combinations Causing Adverse Reactions. *Ninth Annual Research Lyceum at the University of Texas at Tyler*
- 2. Dixit, R., Veronin, M. and **Schumaker, R.**, Determining Mortality Liklihood of Opioid Drug Combinations using Decision Tree Analysis. *IEEE Access*

## Conference Proceedings

- 1. **Schumaker**, **R.**, Veronin, M., Rohm, T., Dixit, R., Aljawarneh, S. and Lara. J., (2021). An Analysis of COVID-19 Allergic Reactions. *International Information Management Association (IIMA-2021*). October 2021. Utrecht, Netherlands
- De Almeida Rocha, R., Gopalakrishna-Remani, V., Fischer, M., Lamichhane, R. and Schumaker, R., (2020). Impact of the Length of Stay on Readmission Percentage and Determination of Cohort of Patients and Influence of Length of Stay on Readmission Rates to Decide Resource Allocation and Reduce Financial Impact for a Texas Not For Profit Healthcare System. The 50th Annual Meeting of the Southwest Decision Support Institute (SWDSI-2020). March 2020. San Antonio, TX
- 3. Shamburger, D., Gopalakrishna-Remani, V., Fischer, M. and **Schumaker, R.**, (2020). Impact of the Length of Stay, Cohort of Patients and Age on Wheelchair Mode of Transportation at a Texas Not-for-Profit Healthcare System. *The 50th Annual Meeting of the Southwest Decision Support Institute (SWDSI-2020*). March 2020. San Antonio, TX
- 4. Dixit, R., **Schumaker**, **R.** and Veronin, M., (2018). A Decision Tree Analysis of Opioid and Prescription Drug Interactions Leading to Death Using the FAERS Database. *International Information Management Association (IIMA-2018)*. October 2018. Houston, TX
- 5. Veronin, M., **Schumaker**, **R.**, Dixit, R. and Ogwo, M., (2018). Irony of the FAERS Database: An Analysis of Data Input Errors and Potential Consequences. *International Information Management Association* (*IIMA-2018*). October 2018. Houston, TX
- 6. **Schumaker, R.**, Veronin, M., Dixit, R., Dhake, P. and Mason, D., (2017). Calculating a Severity Score of an Adverse Drug Event Using Machine Learning on the FAERS Database. *International Information Management Association (IIMA-2017)*. September 2017. Glasgow, Scotland
- 7. Spillman, J., Bustamante, G., Hopkins, T. and **Schumaker, R.**, (2016). Predicting the Outcomes of the 2016 NCAA March Madness Mens Tournament Brackets: A Study of Fan Twitter Sentiment. *International Information Management Association (IIMA-2016)*, September 2016. Taipei, Taiwan
- 8. Lopez, H., Perkins, M., Odin, K., Webb, D. and **Schumaker, R.**, (2016). Prediction from Fanbase Opinions: A Study of the League of Legends Community on Twitter. *International Information Management Association (IIMA-2016)*, September 2016. Taipei, Taiwan
- 9. Nail, M., Ugone, C., King, C., Schumaker, R. and Conn, M.E., (2016). Predicting Opening Weekend Box Office Success: Using Social Media Sentiment and YouTube Data. *International Information Management Association (IIMA-2016)*, September 2016. Taipei, Taiwan
- 10. Maida, N. and **Schumaker**, **R.**, (2015). Press Release Engineering- Managing Stock Price through Press Release Manipulation. *International Information Management Association (IIMA-2015)*, October 2015. Chattanooga, TN

- 11. Labedz Jr., C., **Schumaker, R.**, Jarmoszko, A.T. and Freeman, D., (2015). Two Subsystems of Eleven Elements: System Dynamics and Other Approaches in Modeling Association Football. *International Conference of the Systems Dynamics Society*, July 2015. Cambridge, MA
- 12. **Schumaker, R.**, (2010). Analyzing Parts of Speech and their Impact on Stock Price. *International Information Management Association (IIMA-2010)*, October 2010. Utrecht, Netherlands
- 13. **Schumaker, R.**, (2010). An Analysis of Verbs in Financial News Articles and their Impact on Stock Price. *NAACL Workshop on Social Media* (#*Social Media-2010*), June 2010. Los Angeles, CA
- 14. **Schumaker, R.** and Chen, H., (2006). Textual Analysis of Stock Market Prediction Using Financial News Articles. *Americas Conference on Information Systems (AMCIS-2006)*, August 2006. Acapulco, Mexico
- 15. McDonald, D., Chen, H. and **Schumaker, R.**, (2005). Transforming Open-Source Documents to Terror Networks: The Arizona TerrorNet. *American Association for Artificial Intelligence Conference Spring Symposia* (AAAI-2005), March 2005. Stanford, CA
- 16. Reid, E., Qin, J., Chung, W., Xu, J., Zhou, Y., **Schumaker, R.**, Sageman, M. and Chen, H., (2004). Terrorism Knowledge Discovery Project: A Knowledge Discovery Approach to Addressing the Threats of Terrorism. *IEEE International Conference on Intelligence and Security Informatics (ISI-2004)*, June 2004. Tucson, AZ

## Conference Presentations

- 1. Prince, M., Veronin, M. and **Schumaker, R.**, Prediction of Unknown Drug Combinations Causing Adverse Reactions. *LSU Shreveport Regional Student Scholars Forum* (*LSUS-2024*), April 2024. Shreveport, LA
- 2. Vega, L., Veronin, M. and **Schumaker, R.**, A Neural Network Approach to Predicting Opioid Misuse Using Patient Diagnosis and Prescription History. *LSU Shreveport Regional Student Scholars Forum* (*LSUS-2024*), April 2024. Shreveport, LA
- 3. Veronin, M. and **Schumaker, R.**, (2019). Opioid Adjunct Drug Therapy: Evaluating Effectiveness Using Text Analytics of Real World Data. *International Information Management Association (IIMA-2019)*, September 2019. New Rochelle, NY
- 4. Elath, H., Dixit, R., **Schumaker, R.** and Veronin, M., (2018). Predicting Deadly Drug Combinations through a Machine Learning Approach. *Pacific Asia Conference on Information Systems* (*PACIS-2018*). June 2018. Yokohama, Japan
- 5. **Schumaker, R.**, Brown, L., Labedz Jr., C. and Jarmoszko, A.T., (2017). Using Financial Analysis Techniques on Twitter Sentiment to Improve NFL Predictions. *Discourse Approaches to Financial Communication* (*DAFC-2017*), July 2017. Lugano, Switzerland
- Genest, D., Daley, A. and Schumaker, R., (2013). Teachers vs Students Investigating Middle School Students and their Teachers Technical Abilities. *International Information Management Association (IIMA-2013)*, October 2013. New Rochelle, NY
- 7. Fields, A., Shorthouse, A. and **Schumaker, R.**, (2013). Everything has its Price: Privacy Concerns and Rewards for using Mobile Location. *International Information Management Association (IIMA-2013)*, October 2013. New Rochelle, NY
- 8. Gagnon, J., Gray, S., Khalaf, L. and **Schumaker, R.**, (2013). How Universities Can Use Social Media as an Informational Tool. *International Information Management Association (IIMA-2013)*, October 2013. New Rochelle, NY
- 9. **Schumaker, R.**, (2011). From Data to Wisdom: The Progression of Computational Learning in Text Mining. *International Information Management Association (IIMA-2011)*, October 2011. New Orleans, LA

- Schumaker, R., (2011). Using SVM Regression to Predict Harness Races: A One Year Study on Northfield Park. Midwest Decision Sciences Institute Conference (Midwest DSI), May 2011. Indianapolis, IN
- 11. **Schumaker, R.**, Zhang, Y. and Huang, C., (2009). Sentiment Analysis of Financial News Articles. *International Information Management Association (IIMA-2009)*, October 2009. Houston, TX
- 12. **Schumaker, R.**, (2009). Analyzing Representational Schemes of Financial News Articles. *The Third China Summer Workshop on Information Systems* (*CSWIM-2009*), June 2009. Guangzhou, China
- 13. **Schumaker, R.** and Johnson, J., (2008). An Investigation of SVM Regression to Predict Longshot Greyhound Races. *International Information Management Association (IIMA-2008)*, October 2008. San Diego, CA

## Books

1. **Schumaker, R.**, Solieman, O. and Chen, H., (2010). Sports Data Mining- Uncovering New Knowledge and Performance Measures. New York- Springer

## Book Chapters

- 1. Veronin, M., **Schumaker**, **R.**, Dixit, R. and Elath, H., (2022). "Opioids and Frequency Counts in the U.S. Food and Drug Administration Adverse Event Reporting System (FAERS) Database," in Current Aspects in Pharmaceutical Research and Development Vol. 8, pp 35-43 London-BP International
- 2. **Schumaker**, **R.** and Reganti, R., (2016). Implementation of Electronic Health Record (HER) System in the Healthcare Industry, in Information Resources Management Association, E-Health and Telemedicine: Concepts; Methodologies; Tools; and Applications, pp 1001-1016 Hershey; PA- IGI Global
- 3. **Schumaker, R.** and Chen, H., (2011). Predicting Stock Price Movement from Financial News Articles, in Yap; A., IS for Global Financial Markets, pp 96-128 New York- IGI Global
- 4. **Schumaker, R.** and Chen, H., (2006). Case Study 17- A Dialog System for Terrorism Resources, in Chen; H., Intelligence and Security Informatics for International Security-Information Sharing and Data Mining, pp 136-139 New York-Springer

## Posters and Demonstrations

- 1. Conneen, W., Vegas, L., Veronin, M. and **Schumaker, R.**, (2023). Using Artificial Intelligence to Predict Opioid Abuse in Hospital Settings. *Eighth Annual Research Lyceum at the University of Texas at Tyler*, April 2023. Tyler, TX
- 2. Boyett, C., **Schumaker**, **R.** and Veronin, M., (2020). Effects of Adjuncts on Opioids. *Fifth Annual Research Lyceum at the University of Texas at Tyler*, April 2020. Tyler, TX
- 3. Prasun, P., **Schumaker, R.** and Veronin, M., (2019). Individual vs Combination Drug Effects Using FAERS Database. *Fourth Annual Research Lyceum at the University of Texas at Tyler*, April 2019. Tyler, TX
- 4. Cisneros, E., **Schumaker**, **R.** and Veronin, M., (2019). Discovering Safer Drug Combination Alternatives Using FAERS. *Fourth Annual Research Lyceum at the University of Texas at Tyler*, April 2019. Tyler, TX
- 5. Ogwo, M., Dixit, R., **Schumaker, R.** and Veronin, M., (2018). Deaths Associated with Opioids Reported in the FAERS Database. *Third Annual Research Lyceum at the University of Texas at Tyler*, April 2018. Tyler, TX
- 6. Mason, D., **Schumaker, R.**, Veronin, M., Dixit, R., Dhake, P., Elath, H. and Scoggins, A., (2018). Standardizing the FDA Adverse Reporting System (FAERS) Database. *Third Annual Research Lyceum at the University of Texas at Tyler*, April 2018. Tyler, TX

- 7. Dixit, R., **Schumaker, R.**, Veronin, M. and Dhake, P., (2018). A Decision Tree Analysis of Opiod and Prescription Drug Interactions Leading to Death Using the FAERS Database. *Third Annual Research Lyceum at the University of Texas at Tyler*, April 2018. Tyler, TX
- 8. Ogwo, M., Dixit, R., **Schumaker, R.** and Veronin, M., (2018). Deaths Associated with Opioids Reported in the FAERS Database. *American Society of Health-System Pharmacists Midyear Clinical Meeting and Exhibition*, December 2018. Anaheim, CA
- 9. Mason, D., **Schumaker, R.**, Veronin, M., Dixit, R., Dhake, P., Elath, H. and Scoggins, A., (2017). Standardizing the FDA Adverse Reporting System (FAERS) Database. *52nd National Collegiate Honors Council Annual Conference*, November 2017. Atlanta, GA
- 10. Jarmoszko, A. T., Labedz Jr., C. and **Schumaker, R.**, (2016). Toward a Model of Collective Intelligence of Sporting Teams Examining Data from the 2014 Soccer World Cup. *Collective Intelligence*, June 2016. New York, NY
- 11. **Schumaker, R.**, Jarmoszko, A. T., Labedz Jr., C. and Freeman, D., (2015). Predicting Premier League Soccer Using a Sentiment Analysis of Twitter. *MIT Sloan Sports Analytics Conference*, February 2015. Boston, MA
- 12. **Schumaker, R.**, Chen, H., Wang, T. and Wilkerson, J., (2005). Terror Tracker System- A Web Portal for Terrorism Research. *Joint Conference on Digital Libraries (JCDL-2005)*, June 2005. Denver, CO
- 13. **Schumaker, R.** and Chen, H., (2005). Question Answer TARA- A Terorrism Activity Resource Application. *IEEE International Conference on Intelligence and Security Informatics (ISI-2005)*, May 2005. Atlanta, GA

## Working Papers

- 1. **Schumaker, R.**, Veronin, M. and Dixit, R., Machine Learning the FAERS Database to Predict Unknown Deadly Drug Combinations. *ACM Transactions on Information Systems*
- 2. **Schumaker, R.**, Veronin, M. and Dixit, R., An Automatic System to Identify Adverse Drug Reaction Severity for n-Drug Combinations. *Data Mining and Knowledge Discovery*
- 3. **Schumaker, R.**, Veronin, M. and Dixit, R., Predicting Adverse n-Drug Reactions in Cardiovascular Events: A Machine Learning Investigation of the FAERS Database. *Journal of Biomedical Informatics*

## Academic Labs and Centers

## Data Analytics Lab - University of Texas at Tyler

Founder and Director - www.uttyler.edu/cs/data-analytics-lab

- Created a lab space to further collegiate analytics research needs
  - Built research collaboration partnerships with UT Tyler faculty in Business, Pharmacy and Nursing
  - o Created a space for students to further their classroom or personal learning in data science
- Obtained necessary funding for student assistants and equipment through startup funds and grants
  - Actively manage an annual approximate budget of \$25,000
  - Responsible for hiring and managing multiple Graduate Assistants and undergraduate researchers
  - Create compliance reports as needed
  - Demonstrated the need for and proposed a College of Business Lab Manager position
- Sought and built the lab's hardware, software and networking infrastructure
  - Produce and oversaw specifications for external design and quote services
  - Creatively used existing University salvage with strategic purchases to build infrastructure
    - Networking
      - 10Gbps network connection between the lab and UT Austin supercomputers
    - Servers

- Red 24 core 2.66GHz Xeons with 128GB memory (machine learning)
- White 12 core 3.5GHz i7 with 128GB memory (machine learning)
- Blue 48 core 3.0GHz Xeons with 512GB memory (machine learning)
- Plus a dedicated storage machine, development machine and several data acquisition machines
- Workstations
  - Eight workstations of 8 core 3.6GHz i7 with 64GB memory
- o Install and maintain operating systems and necessary software needs
  - Linux Mint, Ubuntu, mySQL Server, mySQL Workbench, R, RStudio, Eclipse as well as several data acquisition programs I wrote myself using web scraping and Twitter APIs
  - Maintain active documentation of all installation procedures
  - Troubleshoot equipment as needed
- o Maintain access control and security mechanisms
- Coordinate with various UT Tyler entities including Computing Services, Classroom Technology, Networking Operations, Systems Support, IT Security, Office of Research and Scholarship, Marketing and Communications, University Advancement and Purchasing
- o Create and maintain the Data Analytics webspace
  - Oversaw development and integration of a Drug Interaction Checker webtool based on lab research where users input a combination of prescription drugs and patient demographics to receive a customized report of adverse drug events matching the criteria from our cleaned FDA FAERS data
  - Oversaw development and integration of a Twitter-based Sports Wagering webtool based on lab research that uses tweet sentiment and modified stock forecasting algorithms to predict game outcomes
- Built out and maintain both internal and external lab communication and work scheduling mechanisms via Slack
- In the process of creating a data repository environment of lab data for external collaboration and sharing with other researchers
  - Cleaned version of FDA FAERS data
  - Social media for MLB, NFL, NBA, NHL, EPL and 2020 Presidential candidates
  - Financial news documents and per minute stock quotes on S&P500 companies
- Productive in research output since founding in 2015
  - 12 journal articles
  - 15 conference proceedings/presentations
  - 1 book chapter
  - 9 conference posters

## Patents: Granted, Applied and Under Review

1. **Schumaker, R.**, Veronin, M. and Dixit, R., A Pharmacovigilance System to Predict Drug Reaction Severity. Provisional Patent 69 / 989,413

## Grants: Funded, Proposed and Under Review

- 1. RFA-DA-24-025 NIDA REI: Training a Diverse Data Science Workforce for Addiction Research, "AI/ML for Addiction Research: An Interprofessional Education Program," 2024, \$670,6250. *Under Review*
- 2. Advanta Genetics Quality Control Proposal, 2022 \$35,172. Paused by Agency
- 3. RFA-CE-18-006 Centers for Disease Control and Prevention ERA, "TylerADE A Pharmacovigilance Tool to Improve Opioid Drug Safety," 2018, \$1,609,121. *Declined*
- 4. Presidential Interdisciplinary Grants Program, "TylerCardiac A Pharmacovigilance Tool to Improve

- Cardiac Prescription Drug Safety," 2018, \$17,000. Funded
- 5. Amazon Web Services Educate, "COSC 4309 Design of MIS course," 2018, \$75. Funded
- 6. Sanofi Innovation iAwards, "A Machine Learning Approach to Predict Cardiac-Related Adverse Drug Reactions of Multiple Prescriptions Using the FAERS Database," 2017, \$125,000. *Declined*
- 7. Texas Advanced Computing Center (TACC), "TylerADE and Prescription Drug Safety," 2017, Stampede Supercomputer Access 150,000 node hours. *Funded*
- 8. Amazon Web Services Educate, "COSC 4309 Design of MIS course," 2017, \$75. Funded
- 9. American Heart Association AIREA Grant, "A Machine Learning Approach to Predict Cardiac-Related Adverse Drug Reactions of Multiple Prescriptions Using the FAERS Database," 2017, \$153,917. Declined
- 10. AP Healthcare Research Grant, "Calculating a Severity Score of an Adverse Drug Reaction Using SVR on the FAERS Database," 2017, \$10,000. *Declined*
- 11. Texas Advanced Computing Center (TACC), "Sentiment Content Analysis of Media," 2015, Wrangler Supercomputer Access 1,000 node hours and 100GB storage. *Funded*
- 12. IBM BlueMix Academic Initiative for Cloud, 2015, IBM BlueMix Cloud Access. Funded
- 13. Microsoft Azure Educator Grant Award, "COSC 4309 Design of MIS course," 2015, \$18,000. Funded
- 14. CCSU AAUP, "Sentiment Analysis of Twitter on English Premier League Soccer," 2014, \$4,530. Declined
- 15. CCSU AAUP, "Centrals Financial Sentiment Project," 2013, \$9,253. Declined
- 16. CCSU AAUP, "Sentiment Analysis of Twitter on English Premier League Soccer" 2013, \$4,530. Declined
- 17. CELTIC Excellence in Teaching Awards, "Exploring the Link between Internet Applications and Robotics," 2009, \$1,500. Funded
- 18. Price Waterhouse Coopers Inquires, "Leveraging XBRL for Continuous Auditing," 2007, \$152,838. *Declined*
- 19. National Science Foundation The National Science Digital Library, "Knowledge Creation and Integration for NSDL: Learning Support for Digital Libraries," 2005, \$499,865. *Declined*

## Research Advising and Mentoring

## Thesis and Dissertation Advising

1. Maida, N., (2015). Press Release Engineering: Leveraging the Power of Press Releases to Manage Stock Price. *Central Connecticut State University Honors Thesis* 

## Presidential Fellow Research Mentoring

1. Matthew (Clint) Boyett, 2019 2020

## Honors Research Project Advising

- 1. Lucas Vega, 2021 Present. A Neural Network Approach to Predict Opioid Abuse using Patient Diagnosis and Prescription History.
- 2. Jose Currea Vergara, 2020 2021. A Sabermetric Analysis of How Covid-19 Affected MLB Playoffs.

## Aspire Teaching Fellowship

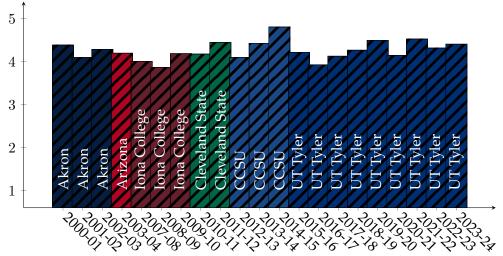
1. Seth Norman, 2022

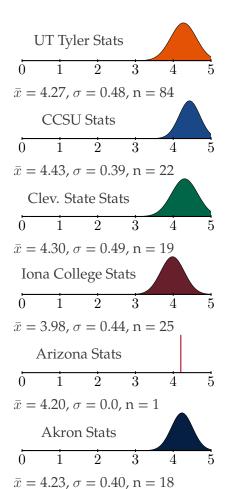
## Teaching

Overall Teaching Evaluation ( $\bar{x}$ =4.24,  $\sigma$ =0.46, n=173,  $G\bar{P}A$ =3.04)

Excellent (5.0), Above Average (4.0), Average (3.0), Below Average (2.0), Failing (1.0)

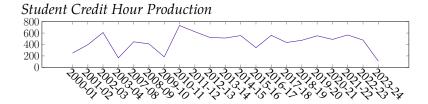
Teaching Evaluations by Academic Year



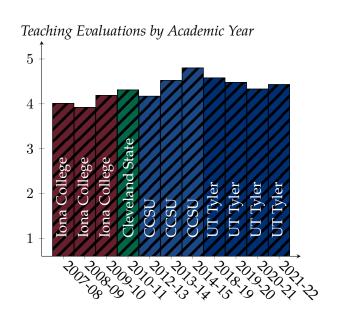


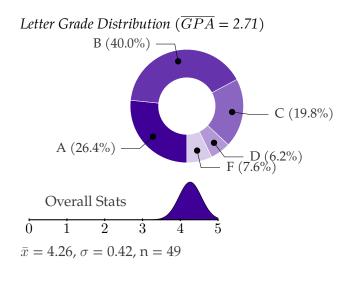
Class	Akron	Ariz.	Iona	Clev.	CCSU	UT Tyler
Business Info. Sys.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Business Intelligence						<b>√</b>
Capstone Project						<b>√</b>
Continuing Education	<b>√</b>					
Database				<b>√</b>		<b>√</b>
Data Mining			<b>√</b>			
Design of IS						<b>√</b>
eCommerce					<b>√</b>	<b>√</b>
ERP Architecture						<b>√</b>
First Year Experience					<b>√</b>	
Independent Study						✓
Internet Applications			✓			
Machine Learning						✓
Managing IT					✓	
Microsoft Office	✓			<b>√</b>		<b>√</b>
Network Construction			<b>√</b>			
Networking			✓			✓
Programming				<b>√</b>		✓
Quantitative Investing	•		✓			
Research Methods						<b>√</b>
Security				<b>√</b>		
Sports Data Analytics						<b>√</b>
Systems Analysis						<b>√</b>
Text Analytics						<b>√</b>

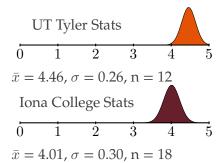
# Teaching Productivity Number of Students 3,160 Student Credit Hours 9,415 Withdrawal Rate 4.91%

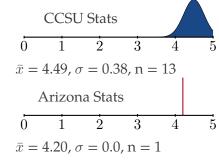


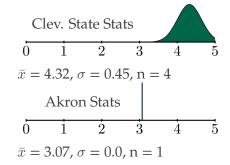
## Business Information Systems













## University of Texas at Tyler ( $\bar{x}$ =4.47, $\sigma$ =0.27, n=12)

Class	Semester	Rating	Class GPA
COSC 3333-060	Summer 2022	Teacher Rating of 4.27 on a 5.0 scale	GPA: 2.45
COSC 3333-002	Spring 2022	Teacher Rating of 4.36 on a 5.0 scale	GPA: 2.73
COSC 3333-002	Fall 2021	Teacher Rating of 4.66 on a 5.0 scale	GPA: 2.51
COSC 3333-060	Summer 2021	Teacher Rating of 4.50 on a 5.0 scale	GPA: 2.56
COSC 3333-062	Spring 2021	Teacher Rating of 4.34 on a 5.0 scale	GPA: 2.11
COSC 3333-002	Fall 2020	Teacher Rating of 4.16 on a 5.0 scale	GPA: 2.43
COSC 3333-460	Summer 2020	Teacher Rating of 4.90 on a 5.0 scale	GPA: 2.45
COSC 3333-003	Spring 2020	Teacher Rating of 4.02 on a 5.0 scale	GPA: 2.56
COSC 3333-002	Fall 2019	Teacher Rating of 4.53 on a 5.0 scale	GPA: 2.73
COSC 3333-460	Summer 2019	Teacher Rating of 4.80 on a 5.0 scale	GPA: 2.61
COSC 3333-001	Summer 2019	Teacher Rating of 4.63 on a 5.0 scale	GPA: 3.42
COSC 3333-002	Fall 2018	Teacher Rating of 4.30 on a 5.0 scale	GPA: 2.13

## **→○○○○**

## Central Connecticut State University ( $\bar{x}$ =4.49, $\sigma$ =0.38, n=13)

Class	Semester	Rating	Class GPA
MIS 201-1	Spring 2015	Teacher Rating of 4.87 on a 5.0 scale	GPA: 2.93
MIS 201-6	Spring 2015	Teacher Rating of 4.73 on a 5.0 scale	GPA: 2.76
MIS 201-C01	Winter 2015	No Results (no evaluation)	GPA: 3.14
MIS 201-6	Fall 2014	Teacher Rating of 4.80 on a 5.0 scale	GPA: 2.64
MIS 201-F38	Fall 2014	Teacher Rating of 4.79 on a 5.0 scale	GPA: 2.87
MIS 201-5	Spring 2014	Teacher Rating of 4.60 on a 5.0 scale	GPA: 2.62
MIS 201-2	Spring 2014	Teacher Rating of 4.63 on a 5.0 scale	GPA: 3.19
MIS 201-1	Fall 2013	Teacher Rating of 4.31 on a 5.0 scale	GPA: 1.80
MIS 201-2	Fall 2013	Teacher Rating of 4.53 on a 5.0 scale	GPA: 2.60
MIS 201-1	Summer 2013	Teacher Rating of 4.80 on a 5.0 scale	GPA: 2.60
MIS 201-3	Spring 2013	Teacher Rating of 3.67 on a 5.0 scale	GPA: 1.41
MIS 201-2	Fall 2012	Teacher Rating of 3.89 on a 5.0 scale	GPA: 2.86
MIS 201-70	Fall 2012	Teacher Rating of 4.33 on a 5.0 scale	GPA: 3.28

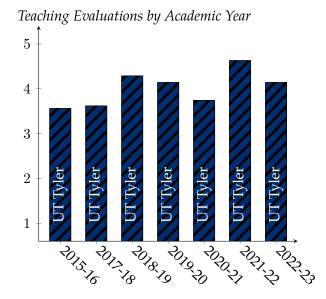
## Cleveland State University ( $\bar{x}$ =4.32, $\sigma$ =0.45, n=4)

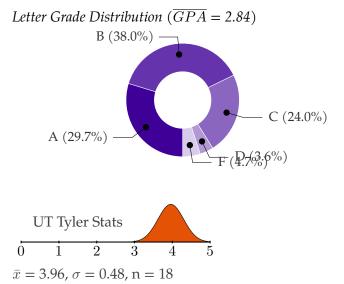
IST 305-1	Spring 2011	Teacher Rating of 4.74 on a 5.0 scale	GPA: 2.29
IST 305-502	Spring 2011	Teacher Rating of 4.27 on a 5.0 scale	GPA: 2.26
IST 305-1	Fall 2010	Teacher Rating of 4.54 on a 5.0 scale	GPA: 2.40
IST 305-2	Fall 2010	Teacher Rating of 3.71 on a 5.0 scale	GPA: 3.00



Iona College (ā	$\bar{x}$ =4.01, $\sigma$ =0.30, $n$ =	=18)	
BUS 150B	Fall 2009	Teacher Rating of 4.38 on a 5.0 scale	GPA: 3.28
BUS 150C	Fall 2009	Teacher Rating of 3.75 on a 5.0 scale	GPA: 3.20
BUS 150D	Fall 2009	Teacher Rating of 4.44 on a 5.0 scale	GPA: 2.11
BUS 150EA	Summer 2009	Teacher Rating of 3.75 on a 5.0 scale	GPA: 2.75
MBA 580	Summer 2009	No Results (no evaluation)	GPA: 3.00
BUS 150C	Spring 2009	Teacher Rating of 4.34 on a 5.0 scale	GPA: 3.04
BUS 150D	Spring 2009	Teacher Rating of 4.25 on a 5.0 scale	GPA: 2.64
BUS 150E	Spring 2009	Teacher Rating of 3.96 on a 5.0 scale	GPA: 2.80
BUS 150C	Fall 2008	Teacher Rating of 3.63 on a 5.0 scale	GPA: 2.75
BUS 150D	Fall 2008	Teacher Rating of 3.59 on a 5.0 scale	GPA: 3.00
BUS 150EA	Summer 2008	Teacher Rating of 4.38 on a 5.0 scale	GPA: 2.67
BUS 150EB	Summer 2008	Teacher Rating of 3.75 on a 5.0 scale	GPA: 2.17
BUS 150C	Spring 2008	Teacher Rating of 3.91 on a 5.0 scale	GPA: 3.00
BUS 150M	Spring 2008	Teacher Rating of 3.81 on a 5.0 scale	GPA: 2.95
BUS 150D	Spring 2008	Teacher Rating of 4.03 on a 5.0 scale	GPA: 3.00
BUS 150D	Fall 2007	Teacher Rating of 3.96 on a 5.0 scale	GPA: 2.35
BUS 150E	Fall 2007	Teacher Rating of 3.75 on a 5.0 scale	GPA: 2.62
BUS 150F	Fall 2007	Teacher Rating of 4.48 on a 5.0 scale	GPA: 2.40
		<b>→</b> 0 <b>○</b> 0 <b>○</b> 0 <b>○</b>	
University of A	Arizona		
MIS 304	Summer 2004	Teacher Rating of 4.20 on a 5.0 scale	GPA: 3.71
University of A	Akron		
6500:310-080	Fall 2001	Teacher Rating of 3.07 on a 5.0 scale	GPA: 3.75
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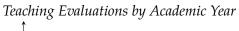
## Business Intelligence and Analytics

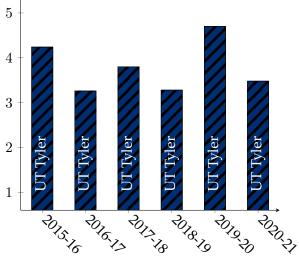




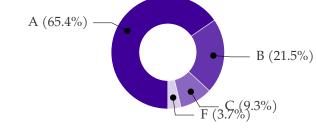


University of Texas at Tyler					
Class	Semester	Rating	Class GPA		
COSC 5347-001	Spring 2024	Scheduled			
COSC 4347-001	Summer 2024	In Progress			
COSC 5347-001	Spring 2024	In Progress			
COSC 5347-060	Summer 2023	Teacher Rating of 4.60 on a 5.0 scale	GPA: 3.40		
COSC 4347-001	Spring 2023	Teacher Rating of 4.02 on a 5.0 scale	GPA: 2.47		
COSC 5347-001	Spring 2023	Teacher Rating of 3.80 on a 5.0 scale	GPA: 2.80		
COSC 4347-001	Spring 2022	Teacher Rating of 4.63 on a 5.0 scale	GPA: 3.19		
COSC 5347-001	Spring 2022	No Results (cross-taught)			
COSC 4347-001	Spring 2021	Teacher Rating of 3.74 on a 5.0 scale	GPA: 2.92		
COSC 5347-001	Spring 2021	No Results (cross-taught)			
COSC 4347-001	Spring 2020	Teacher Rating of 4.14 on a 5.0 scale	GPA: 2.45		
COSC 5347-001	Spring 2020	No Results (cross-taught)			
COSC 4347-001	Spring 2019	Teacher Rating of 4.29 on a 5.0 scale	GPA: 2.52		
COSC 5347-001	Spring 2019	No Results (cross-taught)			
COSC 4347-001	Spring 2018	Teacher Rating of 3.09 on a 5.0 scale	GPA: 2.70		
COSC 5347-001	Spring 2018	Teacher Rating of 4.15 on a 5.0 scale	GPA: 2.68		
COSC 4390-460	Summer 2016	Teacher Rating of 3.80 on a 5.0 scale	GPA: 2.75		
COSC 5390-460	Summer 2016	Teacher Rating of 3.32 on a 5.0 scale	GPA: 3.74		
pstone Project					





# Letter Grade Distribution ( $\overline{GPA} = 3.45$ )



UT Tyler Stats 
$$\bar{u}$$
  $\bar{u}$   $\bar{u}$ 



Class	xas at Tyler Semester	Rating	Class GPA
COSC 4375-001	Spring 2021	Teacher Rating of 3.48 on a 5.0 scale	GPA: 3.79
COSC 4375-001	Spring 2020	Teacher Rating of 4.70 on a 5.0 scale	GPA: 3.46
COSC 4375-001	Spring 2019	Teacher Rating of 3.28 on a 5.0 scale	GPA: 2.00
COSC 4375-001	Spring 2018	Teacher Rating of 3.80 on a 5.0 scale	GPA: 3.15
COSC 4375-001	Spring 2017	Teacher Rating of 2.97 on a 5.0 scale	GPA: 3.29
COSC 4395-001	Spring 2017	Teacher Rating of 3.54 on a 5.0 scale	GPA: 3.67
COSC 4375-001	Spring 2016	Teacher Rating of 3.97 on a 5.0 scale	GPA: 4.00
COSC 4395-001	Spring 2016	Teacher Rating of 4.50 on a 5.0 scale	GPA: 4.00
ntinuing Educ		O	

Class Stats ( $\bar{x}$ =4.20,  $\sigma$ =0, n=1)



## University of Akron

Class	Semester	Rating	Class GPA
7677	Spring 2002	Teacher Rating of 4.20 on a 5.0 scale	

## Database

Class Stats ( $\bar{x}$ =3.92,  $\sigma$ =0.47, n=5)



## *University of Texas at Tyler* ( $\bar{x}$ =3.86, $\sigma$ =0.56, n=3)

Class	Semester	Rating	Class GPA
COSC 3385-001	Spring 2019	Teacher Rating of 3.80 on a 5.0 scale	GPA: 2.18
COSC 3385-001	Spring 2018	Teacher Rating of 4.45 on a 5.0 scale	GPA: 2.77
COSC 3385-001	Spring 2017	Teacher Rating of 3.34 on a 5.0 scale	GPA: 2.62

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Cleveland	State	University
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Class	Semester	Rating	Class GPA
IST 331-50	Spring 2012	Teacher Rating of 4.07 on a 5.0 scale	GPA: 2.67
IST 604-50	Spring 2012	No Results (cross-taught)	

## Data Mining

Class Stats ( $\bar{x}$ =2.75,  $\sigma$ =0, n=2)



## Iona College

Class	Semester	Rating	Class GPA
IS 685	Fall 2009	No Results (no evaluation)	GPA: 2.00
IS 685	Fall 2008	Teacher Rating of 2.75 on a 5.0 scale	GPA: 3.83

## Design of Modern Information Systems

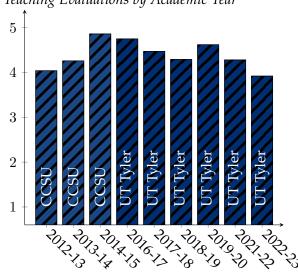
Class Stats ( $\bar{x}$ =4.49,  $\sigma$ =0.09, n=3)



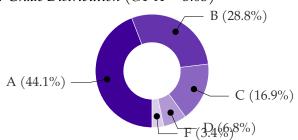
Class	Semester	Rating	Class GPA
COSC 4309-001	Fall 2017	Teacher Rating of 4.45 on a 5.0 scale	GPA: 2.59
COSC 4309-001	Fall 2016	Teacher Rating of 4.43 on a 5.0 scale	GPA: 3.87
COSC 4309-001	Fall 2015	Teacher Rating of 4.59 on a 5.0 scale	GPA: 3.50

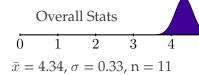
## eCommerce)

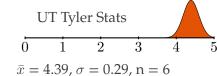
Teaching Evaluations by Academic Year

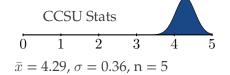


## *Letter Grade Distribution* ( $\overline{GPA} = 3.03$ )









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#### *University of Texas at Tyler* ( $\bar{x}$ =4.39, $\sigma$ =0.29, n=6)

Class	Semester	Rating	Class GPA
COSC 3331-001	Fall 2022	Teacher Rating of 3.92 on a 5.0 scale	GPA: 3.42
COSC 3331-002	Fall 2021	Teacher Rating of 4.28 on a 5.0 scale	GPA: 2.70
COSC 3331-001	Fall 2019	Teacher Rating of 4.62 on a 5.0 scale	GPA: 3.31
COSC 3331-001	Fall 2018	Teacher Rating of 4.29 on a 5.0 scale	GPA: 2.93
COSC 3331-001	Fall 2017	Teacher Rating of 4.47 on a 5.0 scale	GPA: 2.59
COSC 3331-001	Fall 2016	Teacher Rating of 4.75 on a 5.0 scale	GPA: 3.08

Central Connecticut State University ( $\bar{x}$ =4.29,  $\sigma$ =0.40, n=5)

Class	Semester	Rating	Class GPA
MIS 305-70	Fall 2014	Teacher Rating of 4.86 on a 5.0 scale	GPA: 3.59
MIS 305-70	Spring 2014	Teacher Rating of 4.55 on a 5.0 scale	GPA: 2.87
MIS 305-70	Fall 2013	Teacher Rating of 3.96 on a 5.0 scale	GPA: 3.35
MIS 305-70	Spring 2013	Teacher Rating of 3.98 on a 5.0 scale	GPA: 3.54
MIS 305-70	Fall 2012	Teacher Rating of 4.10 on a 5.0 scale	GPA: 3.68
ERP Architectu	ire		

Class Stats ( $\bar{x}$ =4.51,  $\sigma$ =0.09, n=8)



University of Texas at Tyler				
Class	Semester	Rating	Class GPA	
COSC 4312-001	Fall 2020	No Results (no evaluation)	GPA: 3.50	
COSC 5334-001	Fall 2020	No Results (cross-taught)	GPA: 3.00	
COSC 4312-001	Fall 2018	Teacher Rating of 4.60 on a 5.0 scale	GPA: 2.36	
COSC 5334-001	Fall 2018	Teacher Rating of 4.40 on a 5.0 scale	GPA: 3.40	
COSC 4312-001	Fall 2017	Teacher Rating of 4.48 on a 5.0 scale	GPA: 3.60	
COSC 5334-001	Fall 2017	No Results (cross-taught)		
COSC 4312-001	Fall 2016	Teacher Rating of 4.54 on a 5.0 scale	GPA: 3.35	
COSC 5334-001	Fall 2016	No Results (cross-taught)		
t Vear Evnerience				

First Year Experience

Class Stats ( $\bar{x}$ =NA,  $\sigma$ =0, n=1)



Central Connecticut State University

Class	Semester	Rating	Class GPA
FYE 101-F38	Fall 2014	No Results (cross-taught)	GPA: 3.48

Independent Study

Class Stats ( $\bar{x}$ =NA,  $\sigma$ =0, n=4)



University of Texas at Tyler

Class	Semester	Rating	Class GPA
COSC 4399-001	Fall 2017	No Results (no evaluation)	GPA: 4.00
COSC 4399-001	Spring 2017	No Results (no evaluation)	GPA: 3.00
COSC 4399-001	Fall 2016	No Results (no evaluation)	GPA: 3.00
COSC 4399-001	Spring 2016	No Results (no evaluation)	GPA: 4.00

Internet Applications in Business

Class Stats ( $\bar{x}$ =NA,  $\sigma$ =0, n=1)



Iona College			
Class	Semester	Rating	Class GPA
IS 355	Spring 2009	Teacher Rating of 4.69 on a 5.0 scale	GPA: 3.38

## Machine Learning

Class Stats ( $\bar{x}$ =4.58,  $\sigma$ =0.13, n=3)



University of '	Texas i	at Tuler
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Class	Semester	Rating	Class GPA
CSCI 5350-060	Fall 2024	Scheduled	
CSCI 5350-061	Fall 2023	Teacher Rating of 4.49 on a 5.0 scale	GPA: 3.58
CSCI 5350-061	Spring 2023	Teacher Rating of 4.67 on a 5.0 scale	GPA: 4.00

## Managing the IT Value Proposition

Class Stats ( $\bar{x}$ =4.38,  $\sigma$ =0.61, n=2)

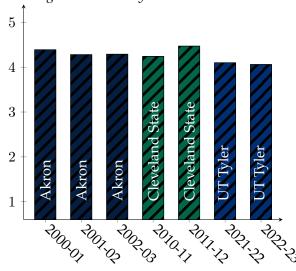


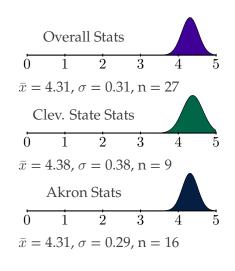
#### Central Connecticut State University

Class	Semester	Rating	Class GPA
MIS 501	Spring 2015	Teacher Rating of 4.81 on a 5.0 scale	GPA: 2.96
MIS 501	Spring 2013	Teacher Rating of 3.95 on a 5.0 scale	GPA: 2.62

## Microsoft Office

Teaching Evaluations by Academic Year







*University of Texas at Tyler* ( $\bar{x}$ =4.08,  $\sigma$ =0.03, n=2)

Class	Semester	Rating	Class GPA
COSC 1307-064	Fall 2022	Teacher Rating of 4.06 on a 5.0 scale	GPA: 2.74
COSC 1307-063	Spring 2022	Teacher Rating of 4.10 on a 5.0 scale	GPA: 3.14

Cleveland State University ( $\bar{x}$ =4.32,  $\sigma$ =0.38, n=9)

Class	Semester	Rating	Class GPA
IST 203-300	Summer 2012	No Results (no evaluation)	GPA: 2.70
IST 203-4	Spring 2012	Teacher Rating of 4.65 on a 5.0 scale	GPA: 3.36
IST 203-5	Spring 2012	Teacher Rating of 4.59 on a 5.0 scale	GPA: 3.41
IST 203-6	Spring 2012	Teacher Rating of 4.61 on a 5.0 scale	GPA: 3.05
IST 203-4	Fall 2011	Teacher Rating of 4.47 on a 5.0 scale	GPA: 3.45
IST 203-504	Fall 2011	Teacher Rating of 4.03 on a 5.0 scale	GPA: 3.05
IST 203-1	Spring 2011	Teacher Rating of 4.62 on a 5.0 scale	GPA: 2.54
IST 203-1	Fall 2010	Teacher Rating of 3.57 on a 5.0 scale	GPA: 3.30
IST 203-4	Fall 2010	Teacher Rating of 4.53 on a 5.0 scale	GPA: 3.00
		<b>→</b> ○ <b>○</b> ○○	
University of Al	kron ( $\bar{x}$ =4.31, $\sigma$ =	•	Class GPA
	Semester	Rating	GPA: 3.09
6200:250-007	Spring 2003	Teacher Rating of 3.91 on a 5.0 scale	
6200:250-006	Spring 2003	Teacher Rating of 4.34 on a 5.0 scale	GPA: 2.81
6200:250-005	Spring 2003	Teacher Rating of 3.59 on a 5.0 scale	GPA: 3.44
6200:250-003	Spring 2003	Teacher Rating of 4.27 on a 5.0 scale	GPA: 2.56
6200:250-008	Fall 2002	Teacher Rating of 4.50 on a 5.0 scale	GPA: 3.38
6200:250-007	Fall 2002	Teacher Rating of 4.49 on a 5.0 scale	GPA: 3.33
6200:250-003	Fall 2002	Teacher Rating of 4.27 on a 5.0 scale	GPA: 2.94
6200:250-002	Fall 2002	Teacher Rating of 4.52 on a 5.0 scale	GPA: 3.33
6200:250-488	Summer 2002	Teacher Rating of 4.60 on a 5.0 scale	GPA: 3.56
6200:250-403	Summer 2002	Teacher Rating of 4.14 on a 5.0 scale	GPA: 4.00
6200:250-002	Spring 2002	Teacher Rating of 4.22 on a 5.0 scale	GPA: 2.52
6200:250-001	Spring 2002	Teacher Rating of 4.43 on a 5.0 scale	GPA: 2.75
6200:250-007	Fall 2001	Teacher Rating of 4.03 on a 5.0 scale	GPA: 3.29
6200:250-101	Summer 2001	Teacher Rating of 4.45 on a 5.0 scale	GPA: 3.54
6200:250-008	Spring 2001	Teacher Rating of 4.54 on a 5.0 scale	GPA: 3.42
6200:250-005	Fall 2000	Teacher Rating of 4.17 on a 5.0 scale	GPA: 3.58
work Constr	uction		
Stats ( $\bar{x}$ =NA, $\sigma$	=0, n=1)		
Louis Callaga		<b>→</b> 0 <b>○</b> 0 <b>○</b>	
Iona College Class	Semester	Rating	Class GPA
IS 450	Summer 2008	No Results (no evaluation)	GPA: 4.00
working		,	
Stats ( $\bar{x}$ =4.50, $\sigma$	r=0, n=2)		
		<b>→</b> ○ <b>○</b> ○○	
University of Te	Č	n .:	OI OP
Class	Semester	Rating	Class GPA
COSC 4325-001	Fall 2015	Teacher Rating of 4.50 on a 5.0 scale	GPA: 3.00
Iona College			
Class	Semester	Rating	Class GPA
IS 991-001	Winter 2007	No Results (no evaluation)	GPA: 2.67
		·	



Class Stats ( $\bar{x}$ =4.66,  $\sigma$ =0.15, n=4)



University of Texas at Tyler

Class	Semester	Rating	Class GPA
COSC 3365-001	Fall 2016	No Results (covered for a colleague)	GPA: 3.39



Cleveland State University

Cieveiana Stati	Cieveiuna state antiversity			
Class	Semester	Rating	Class GPA	
IST 410-50	Fall 2011	Teacher Rating of 4.76 on a 5.0 scale	GPA: 3.44	
CIS 260-1	Spring 2011	Teacher Rating of 4.55 on a 5.0 scale	GPA: 2.95	
CIS 500-50	Spring 2011	No Results (cross-taught)		

## Quantitative Investing

Class Stats ( $\bar{x}$ =4.96,  $\sigma$ =0, n=5)



University of Texas at Tyler

Class	Semester	Rating	Class GPA
CSCI 5348-701	Summer 2024	Scheduled	
CSCI 5348-001	Spring 2024	No Results (cross-taught)	
CSCI 5348-060	Spring 2024	Teacher Rating of 4.96 on a 5.0 scale	GPA: 4.00



Iona College

Class	Semester	Rating	Class GPA
IS 615	Summer 2009	No Results (no evaluation)	GPA: 4.00
IS 615	Summer 2008	No Results (no evaluation)	GPA: 3.67

## Research Methods

Class Stats ( $\bar{x}$ =NA,  $\sigma$ =0, n=1)



University of Texas at Tyler

Class	Semester	Rating	Class GPA
COSC 5393-001	Fall 2020	Teacher Rating of 4.70 on a 5.0 scale	GPA: 3.50

## Security

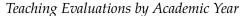
Class Stats ( $\bar{x}$ =NA,  $\sigma$ =0, n=1)

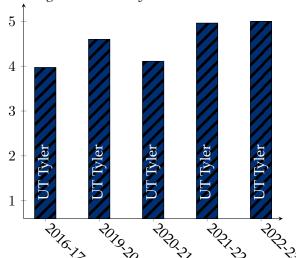


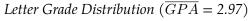
Cleveland State University

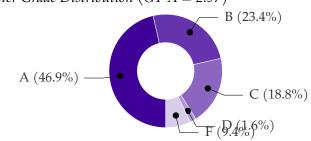
Class	Semester	Rating	Class GPA
IST 736-1	Summer 2011	Teacher Rating of 3.06 on a 5.0 scale	GPA: 4.00

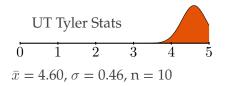
## Sports Data Analytics











Class Stats ( $\bar{x}$ =4.60,  $\sigma$ =0.46, n=10)



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University of Taxas at Tuler	

University of Texas at Tyler			
Class	Semester	Rating	Class GPA
CSCI 4342-001	Fall 2024	Scheduled	
CSCI 5342-001	Fall 2024	Scheduled	
CSCI 5342-060	Summer 2024	Scheduled	
CSCI 5342-060	Summer 2023	Teacher Rating of 5.00 on a 5.0 scale	GPA: 2.63
COSC 4342-001	Fall 2021	Teacher Rating of 5.00 on a 5.0 scale	GPA: 2.60
CSCI 5342-001	Fall 2021	Teacher Rating of 4.93 on a 5.0 scale	GPA: 3.20
COSC 4342-001	Fall 2020	Teacher Rating of 4.11 on a 5.0 scale	GPA: 2.62
COSC 4342-001	Fall 2019	Teacher Rating of 4.60 on a 5.0 scale	GPA: 2.87
CSCI 5342-001	Fall 2019	No Results (cross-taught)	
COSC 4342-001	Spring 2017	Teacher Rating of 3.97 on a 5.0 scale	GPA: 3.50
-1 A1:	1.D.		

## Systems Analysis and Design

Class Stats ( $\bar{x}$ =4.65,  $\sigma$ =0.27, n=3)



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Class	Semester	Rating	Class GPA
COSC 3375-001	Fall 2024	Scheduled	
COSC 3375-001	Fall 2022	Teacher Rating of 4.46 on a 5.0 scale	GPA: 2.86
COSC 3375-001	Fall 2015	Teacher Rating of 4.84 on a 5.0 scale	GPA: 2.59

Class Stats ( $\bar{x}$ =3.77,  $\sigma$ =0, n=2)



*University of Texas at Tyler* ( $\bar{x}$ =,  $\sigma$ =, n=2)

Class	Semester	Rating	Class GPA
CSCI 5345-060	Fall 2023	Teacher Rating of 3.77 on a 5.0 scale	GPA: 2.91
CSCI 5345-061	Fall 2023	No Results (cross-taught)	GPA: 4.00

## Writing and Research III: Honors Thesis

Class Stats ( $\bar{x}$ =NA,  $\sigma$ =0, n=1)

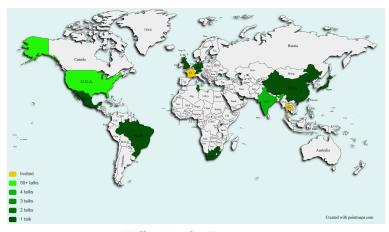


Central Connecticut State University

Class	Semester	Rating	Class GPA
HON 441-21	Spring 2015	No Results (no evaluation)	GPA: 4.00

Service

## Professional Service



Talks Map by Frequency

## Keynote and ACM Distinguished Speaker Invitations

- 1. Invitation, 4th International Conference on Robotics and Artificial Intelligence (ISTDRAI-2024), Dubai, United Arab Emirates, November 18-19, 2024, Declined.
- 2. Invitation, *International Conference on Data Science*, *E-learning and Information Systems* (*DATA-2023*), Dubai, United Arab Emirates, April 25-27, 2023, *Canceled*.
- 3. Invitation, 2nd International Conference on Modern Management based on Big Data (MMBD2021), Quanzhou, China, November 8-11, 2021, Declined.
- 4. "Lessons from the Future: Predictions in Finance, Sports and Medicine," *International Conference on Data Science, E-learning and Information Systems* (*DATA-2019*), Dubai, United Arab Emirates, December 3, 2019.
- 5. Invitation, *International Conference on Big Data Analytics and Data Science (Data Science 2019)*, Las Vegas, Nevada, November 11-12, 2019, *Declined*.
- 6. Invitation, Ethical Hacking Conference (eHaCON-2019), Kolkata, India, August 22-23, 2019, Declined.
- 7. "Becoming a Data Scientist," *National Institute of Applied Science and Technology ACM Student Chapter*, Tunis, Tunisia, April 7, 2019.

- 8. "Motivation for Data Science," *Ecole Supérieure Privée d'Ingénierie et de Technologies*, Tunis, Tunisia, April 6, 2019.
- 9. "Becoming a Data Scientist," IT University ACM Student Chapter, Kerkwijk, Netherlands, 2019, Declined.
- 10. "Lessons from the Future:Predictions in Finance, Sports and Medicine," *IEEE International Conference on Advances in Big Data, Computing and Data Communication Systems* (*icABCD-2018*), Durban, South Africa, July 28, 2018.
- 11. "Becoming a Data Scientist," *Institute of Engineering and Management ACM Student Chapter*, Kolkata, India, July 28, 2018.
- 12. "Machine Learning the Harness Track: Crowdsourcing and Varying Race History," *University of Engineering and Management ACM Student Chapter*, Jaipur, India, July 26, 2018.
- 13. "Prediction from Regional Angst A Study of NFL Sentiment in Twitter using Stock Market Charting," *United States Army Corps of Engineers*, Vicksburg, Mississippi, June 20, 2018.
- 14. Invitation, *University of Engineering and Management ACM Student Chapter*, Jaipur, India, March 16, 2018, *Declined*.
- 15. "Evaluating Sentiment in Financial News Articles," *ABES Engineering College*, Ghaziabad, India, March 13, 2018.
- 16. Invitation, World Congress of Biomedical Engineering, Xian, China, November 9-11, 2017, Declined.
- 17. Invitation, 4th International Conference on Big Data Analysis and Data Mining, Paris, France, September 7-8, 2017, Declined.
- 18. "Predicting Wins and Losses in Team Sports Approaches and Examples," 11th International Symposium on Computer Science in Sport (IACSS-2017), Konstanz, Germany, September 7, 2017.
- 19. Invitation, *BITS-Pilani Technology Festival ACM Student Chapters IIT-Roorkee and Chitkara University*, Roorkee and Chandigarh, India, March 23-27, 2017, *Declined*.
- 20. Invitation, 3rd International Conference on Big Data Analysis and Data Mining, London, England, September 26-27, 2016, Declined.
- 21. Invitation, *International Conference on Mechanical, Electronic and Information Technology*, Phuket, Thailand, August 28-29, 2016, *Declined*.
- 22. Invitation, 2nd International Conference on Big Data Analysis and Data Mining, San Antonio, Texas, November 30-December 2, 2015, Declined.
- 23. "Evaluating Sentiment in Financial News Articles," *ACM Compute (Compute-2014)*, Nagpur, India, October 9, 2014.
- 24. Invitation, *Global Congress of Knowledge Economy (GCKE-2014)*, Qingdao, China, September 21-23, 2014, *Declined*.
- 25. "Evaluating Sentiment in Financial News Articles," *Discourse Approaches to Financial Communication* (*DAFC-2014*), Ascona, Switzerland, February 6, 2014.
- 26. "Financial Text Analysis: The Past, Present and Future," *Discourse Approaches to Financial Communication* (*DAFC-2014*), Ascona, Switzerland, February 4, 2014.
- 27. Invitation, 2nd International Conference on Information Technology (ICIT-2014), Dubai, United Arab Emirates, January 14-16, 2014, Declined.

## Notable Publicity and Interviews



Media Interviews, Publicity, Articles/Segments on my Research

- 1. Staff, (Oct 5, 2022). UT Tyler Now Accepting Students for Online Cybersecurity and Data Analytics Degree Program. *The Gilmer Mirror*. Retrieved October 27, 2022 from https://www.gilmermirror.com/2022/10/05/ut-tyler-now-accepting-students-for-online-cybersecurity-and-data-analytics-degree-program/
- 2. Golden, B., (Oct 5, 2022). UT Tyler Now Accepting Students for Online Cybersecurity and Data Analytics Degree Program. *UT Tyler Office of Marketing and Communications*. Retrieved October 27, 2022 from https://www.uttyler.edu/news/pressrelease/2022/10052022.php
- 3. Ellis, L., (Jan 23, 2020). Cheat on Your Homework? In This Harvard Class, Just Say You're Sorry. *The Chronicle of Higher Education*. Retrieved January 23, 2020 from https://www.chronicle.com/article/Cheaton-Your-Homework-In/247902
- 4. Wellerman, Z., (Jan 15, 2020). Tyler Public Library Begins Great Decisions Lecture Series Focusing on Global Affairs. *Tyler Morning Telegraph*. Retrieved January 16, 2020 from https://tylerpaper.com/news/local/tylerpublic-library-begins-great-decisions-lecture-series-focusing-on/article\_2fb47894-37dc-11ea-beab-8be113a2ffa7.html
- 5. Anonymous, (April 4, 2019). NIT Day Data Science Talk. *InsatPress*. Retrieved August 23, 2019 from https://insatpress.tn/2019/04/04/8620
- 6. Wright, J., (2019). UT Tyler Professor Explains How Sports Analytics Could Predict Super Bowl 53 Winner. KLTV. Retrieved on January 31, 2019 from http://www.kltv.com/2019/01/30/ut-tyler-professor-explains-how-sports-analytics-could-predict-super-bowl-winner
- 7. Moynihan, J., (Jan 30, 2019). The Science of Sports Analytics (Live). KYTX The Noon Show.
- 8. Butler, J., (Jan 30, 2019). Analytics and Superbowl LIII (Live). KLTV East Texas Now.
- 9. Anonymous, (2018). UEM Jaipur to Organize a Lecture by Dr. Robert P. Schumaker. *CollegeDunia*. Retrieved August 13, 2018 from https://collegedunia.com/news/c-25851-uem-jaipur-to-organize-a-lecture-by-dr-robert-p-schumaker
- 10. Chakroborty, U., (May 7, 2018). Distinguished Lecture by Prof. Robert P. Schumaker, University of Texas at Tyler, USA at the UEM Jaipur Premises. *University of Engineering and Management*. Retrieved August 13, 2018 from https://uem.edu.in/news\_event/distinguished-lecture-prof-dr-robert-p-schumaker-university-texas-tyler-usa-uem-jaipur-premises/
- 11. Anonymous, (March 13, 2018). ABESEC ACM Student & Women Chapter. *ABES Engineering College*. Retrieved Jan 13, 2020 from https://www.abes.ac.in/academics/departments/under-graduate/information-technology/events/abes-acm-student-and-w-chapter

- 12. Levine, S., (Sept 27, 2017). AI is Getting a Tryout in Pro Sports. *Axios*. Retrieved Sept 27, 2017 from https://www.axios.com/ai-is-getting-a-tryout-in-pro-sports-2488893312.html
- 13. Buchanan, H., (May 2, 2017). The University of Texas at Tyler Conducts Innovative Research with Advanced Data Analytics Lab. *UT Tyler Office of Marketing and Communications*. Retrieved Oct 2, 2017 from http://www.uttyler.edu/news/pressrelease/2017/04022017.php
- 14. Howarth, M., (Sept 4, 2016). Profs Get in Fluff Over Twitter Betting Result. Daily Star.
- 15. Delfosse, A., (2014). La Data Revolution. *LEquipe Explore*. Retrieved Feb 12, 2015 from http://www.lequipe.fr/explore data-revolution
- 16. Anonymous, (2014). Phi Taus Under 40: More than Just an Award. *The Laurel of Phi Kappa Tau*. 101(2):20-21.
- 17. Anonymous, (Oct 9, 2014). Compute-2014 Begins Today. *The Times of India*. Retrieved Oct 17, 2014 from http://timesofindia.indiatimes.com/city/nagpur/Compute-2014-begins-today/articleshow/44725071.cms
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## Seminars, Invited Talks and Presentations (excluding Conferences)

- 1. "A Data Science Overview," UT Tyler ACM Club, Tyler, Texas, February 27, 2024.
- 2. "Data Analytics Lab Overview," *UT Tyler Executive MBA Healthcare Management*, Tyler, Texas, February 23, 2024.
- 3. Invite, World Congress on Robotics, AI & Computer Science, Tokyo, Japan, February 28-29, 2024, Declined.
- 4. Invite, Artificial Intelligence & Data Science Technologies, Paris, France, September 19-21, 2023, Declined.
- 5. "Computer Science and College Prep," Garaway High School, Sugarcreek, Ohio, March 10, 2023.
- 6. "Internet of Things," *Union Grove High School*, Union Grove, Texas, September 21, 2022.
- 7. "Using APIs to Access Data on Stocks, Social Media, News and More," *Office of Research and Scholarship University of Texas at Tyler*, Tyler, Texas, February 18, 2022.
- 8. "Collecting Real-time Tweets through Twitter's Firehose," Office of Research and Scholarship University of Texas at Tyler, Tyler, Texas, January 28, 2022.
- 9. "Setting Up Amazon Cloud (AWS) and your RStudio Data Collection Environment," *Office of Research and Scholarship University of Texas at Tyler*, Tyler, Texas, December 3, 2021.
- 10. "Lessons from the Future: Predictions in Finance, Sports and Medicine," *International Information Management Association Symposium*, Online, March 1, 2021.
- 11. "What Does Publicly Available Soccer Match Data Actually Tell Us," Brown Bag Lunch Seminar, *Central Connecticut State University*, New Britain, Connecticut, March 26, 2020. Canceled due to COVID-19.

- 12. "Artificial Intelligence and Data," 2020 Great Decisions, Tyler, Texas, March 4, 2019.
- 13. "Prediction from Regional Angst A Study of NFL Sentiment in Twitter Using Stock Market Charting," *Western Washington University*, Bellingham, Washington, May 16, 2019.
- 14. "Becoming a Data Scientist," Western Washington University, Bellingham, Washington, May 16, 2019.
- 15. "Lessons from the Future: Predictions in Finance, Sports and Medicine," *Seattle Pacific University*, Seattle, Washington, May 15, 2019.
- 16. "Becoming a Data Scientist," Seattle Pacific University, Seattle, Washington, May 15, 2019.
- 17. "Prediction from Regional Angst A Study of NFL Sentiment in Twitter Using Stock Market Charting," *University of Texas at Tyler ACM Student Chapter*, Tyler, Texas, November 17, 2016.
- 18. "Sentiment Analysis of Twitter on English Premier League Soccer Games," *University of Texas at Tyler*, Tyler, Texas, May 21, 2015.
- 19. "Sentiment Analysis of Twitter on English Premier League Soccer Games," *Wesleyan Universitys Digital and Computational Knowledge Initiative*, Middletown, Connecticut, April 24, 2015.
- 20. "Evaluating Sentiment in Financial News Articles," *Greater Hartford ACM Chapter*, Hartford, Connecticut, February 26, 2014.
- 21. "Machine Learning the Harness Track: Crowdsourcing and Varying Race History," *SUNY Fredonia*, Fredonia, New York, March 26, 2012.
- 22. "Business Intelligence," Central Connecticut State University, New Britain, Connecticut, March 14, 2012.
- 23. "Machine Learning the Harness Track: Crowdsourcing and Varying Race History," *Central Connecticut State University*, New Britain, Connecticut, March 14, 2012.
- 24. "Machine Learning the Harness Track: Crowdsourcing and Varying Race History," *East Tennessee State University*, Johnson City, Tennessee, February 20, 2012.
- 25. "IT Strategy: Tools and Techniques for Successful Global Deployment," *Indiana State University East*, Richmond, Indiana, February 17, 2012.
- 26. "Machine Learning the Harness Track The Complete Effect of Race History on Prediction," *Eastern Connecticut State University*, Willimantic, Connecticut, December 12, 2011.
- 27. "Creating a Multi-table Query in MS Access," *Eastern Connecticut State University*, Willimantic, Connecticut, December 12, 2011.
- 28. "Machine Learning the Harness Track: Crowdsourcing and Varying Race History," *Cleveland State University*, Cleveland, Ohio, September 19, 2011.
- 29. "Applying Machine Learning to Exotic Wagers at the Harness Track," *Cleveland State University ACM Student Chapter*, Cleveland, Ohio, April 14, 2011.
- 30. "Applying Machine Learning to Exotic Wagers at the Harness Track," *University of Illinois Springfield*, Springfield, Illinois, February 10, 2011.
- 31. "Applying Machine Learning to Exotic Wagers at the Harness Track," *Oregon State University*, Corvallis, Oregon, February 1, 2011.
- 32. "Using SVM Regression to Predict Harness Races: A One Year Study on Northfield Park," *Northeast Ohio Artificial Intelligence Group*, Cleveland, Ohio, November 13, 2010.

- 33. "Using SVM Regression to Predict Harness Races: A One Year Study on Northfield Park," *Cleveland State University ACM Student Chapter*, Cleveland, Ohio, October 27, 2010.
- 34. "Computer Security," *University of South Florida St. Petersburg*, St. Petersburg, Florida, May 27, 2010.
- 35. "Evaluating Sentiment in Financial News Articles," *University of South Florida St. Petersburg*, St. Petersburg, Florida, May 27, 2010.
- 36. "An Investigation of SVM Regression to Predict Longshot Greyhound Races," *Minot State University*, Minot, North Dakota, April 15, 2010.
- 37. "Artificial Intelligence," *Minot State University*, Minot, North Dakota, April 14, 2010.
- 38. "Evaluating Sentiment in Financial News Articles," *Cleveland State University*, Cleveland, Ohio, April 1, 2010.
- 39. "An Investigation of SVM Regression to Predict Longshot Greyhound Races," *Augsburg College*, Minneapolis, Minnesota, March 12, 2010.
- 40. "Sports Knowledge Management and Data Mining," *Iona College Information Systems Dept. Research Seminar*, New Rochelle New York, March 25, 2008.
- 41. "Using SVM Regression to Predict Greyhound Races," *Iona College Information Systems Dept. Research Seminar*, New Rochelle New York, October 22, 2007.
- 42. "Textual Analysis of Stock Market Prediction Using Financial News Articles," *SAS 10th Annual Data Mining Conference*, Las Vegas Nevada, October 2, 2007.
- 43. "Knowledge Acquisition, Delivery and Prediction through Text Mining," *University of Arizona Final Defense*, Tucson Arizona, April 19, 2007.
- 44. "Evaluating a News-Aware Quantitative Trader: The Effect of Momentum and Contrarian Stock Selection Strategies," *Iona College*, New Rochelle New York, April 13, 2007.
- 45. "Using SVM Regression to Predict Greyhound Races," *University of Arizona AI Lab PhD Seminar*, Tucson Arizona, March 30, 2007.
- 46. "Evaluating a News-Aware Quantitative Trader: The Effects of Momentum and Contrarian Stock Selection Strategies," *University of Arizona AI Lab PhD Seminar*, Tucson, Arizona, February 16, 2007.
- 47. "Stock Prediction with Financial News Articles: The Effect of Industry Classification," *University of Arizona MIS Dept. Brown Bag Lecture Series*, Tucson, Arizona, September 1, 2006.
- 48. "Stock Prediction with Financial News Articles: The Effect of Industry Classification," *University of Arizona AI Lab PhD Seminar*, Tucson, Arizona, August 18, 2006.
- 49. "Knowledge Acquisition, Delivery and Prediction through Text Mining," *University of Arizona Oral Examination*, Tucson, Arizona, May 10, 2006.
- 50. "Knowledge Acquisition, Delivery and Prediction through Text Mining," *University of Arizona AI Lab PhD Seminar*, Tucson, Arizona, April 28, 2006.
- 51. "Textual Analysis of Stock Market Prediction Using Breaking Financial News," *University of Arizona AI Lab PhD Seminar*, Tucson, Arizona, November 4, 2005. (52) "Interaction Analysis of the ALICE Chatterbot," *University of Arizona MIS Dept. Written Prelim*, Tucson, Arizona, October 6, 2005.

- 52. "Textual Analysis of Stock Market Prediction Using Breaking Financial News," *University of Arizona AI Lab PhD Seminar*, Tucson, Arizona, July 1, 2005.
- 53. "Evaluating the Efficacy of a Terrorism Question Answer System: The TARA Project," *University of Arizona AI Lab PhD Seminar*, Tucson, Arizona, September 17, 2004.
- 54. "Evaluating Mass Knowledge Acquisition using the ALICE Chatterbot," *University of Arizona AI Lab PhD Seminar*, Tucson, Arizona, January 23, 2004.

## Panel Invitations

1. "What Effect Does a Financial News Article Have on Stock Price," in The Language of Numbers: Understanding Financial Communication from an Applied Linguistics Perspective, *The 18th World Congress of Applied Linguistics (AILA-2017)*, Rio de Janiero, Brazil, July 23-28, 2017.

## **Expert Witness and Testimonies**

- 1. WinView v. DraftKings (2022). Declined.
- 2. Content Square SAS v. Quantum Metric Inc. (2020). Declined.
- 3. Askeladden LLC v. Fred Herz Patents LLC. (2016). Declined.

## Editorial Boards, Editorships and Journal Minutiae

#### Communications of the International Information Management Association

Editorial Board Member, 2017 - Present Editor, 2010 - 2015 Guest Editor, 2009 - 2010

#### **Decision Support Systems**

Associate Editor, 2014 - 2022

## IEEE Access (Special Section - Machine Learning Designs, Implementations and Techniques)

Guest Editor, 2019 - 2020

## **Information Systems Frontiers**

Coordinating Editor, 2018 - 2019

#### Information Systems for Global Financial Markets (book)

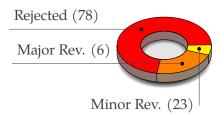
Editorial Board Member, 2010 - 2012

#### **Journal Reviewer**

## Personal Journal Reviewing Metrics







- ACM Transactions on Computer-Human Interaction
- ACM Transactions on Information Systems
- ACM Transactions on Management Information Systems
- Advances in Artificial Neural Systems
- Algorithmic Finance
- Communications of the ACM
- Computer Science and Information Systems
- Decision Support Systems
- Egyptian Informatics Journal
- Electronic Commerce Research and Applications
- European Sport Management Quarterly
- Expert Systems With Applications
- Federation of Business Disciplines Journal
- IEEE Intelligent Systems
- IEEE Transactions on Emerging Topics in Computing
- IEEE Transactions on Knowledge and Data Engineering
- IEEE Transactions on Systems, Man & Cybernetics, Part A
- Information and Management
- Information Systems Frontiers
- International Journal of Agricultural Science Research
- International Journal of Business Continuity and Risk Management
- International Journal of Intelligent Systems
- International Journal of Production Research
- Information Systems Research
- Journal of the American Society for Information Science and Technology
- Journal of the Brazilian Computer Society
- Journal of Economics and International Finance
- Journal of Electronic Commerce Research
- Journal of International Technology and Information
- Journal of Physical Education and Sport Management
- JMIR Infodemiology
- Management of Information Systems Quarterly
- New Emirates Medical Journal
- Pacific Asia Journal of AIS
- Perceptual and Motor Skills
- PLOS One
- Sky Journal of Business Administration

## Grant Boards and Minutiae

#### **European Science Foundation (ESF)**

Reviewer, 2019 ESF College of Expert Reviewers, 2020

#### Israel Science Foundation (ISF)

Reviewer, 2013

#### National Science Foundation (NSF)

Reviewer, 2007

#### **Swiss National Science Foundation (SNSF)**

Reviewer, 2018, 2019, 2022

## Conference Boards, Chairs and Minutiae

#### **Discourse Analysis for Financial Communications**

Scientific Committee, 2016-2017

## IEEE International Conf. on Advances in Big Data, Computing and Data Comm. Systems

Session Chair, 2018

### **IEEE International Conference on Intelligence and Security Informatics**

Program Committee, 2013 Technical Committee, 2023

## International Conference on Artificial Intelligence and its Applications

Technical Program Committee, 2021

#### International Conference on Data Science, E-learning and Information Systems

Track Chair, 2019

#### **International Ethical Hacking Conference**

Advisory Committee, 2019

#### **International Information Management Association**

Immediate Past President, Sept 2017 - Oct 2019 President, Sept 2016 - Sept 2017 President-Elect, Sept 2015 - Sept 2016 Program Chair, Oct 2014 - Sept 2015 Program Committee, 2019 Executive Committee Member, 2010 - Present Track Chair, 2010, 2011, 2013, 2016

#### Joint Intelligence and Security Informatics Conference

Program Committee, 2014

#### LSUS Student Scholars Forum

Session Moderator, 2024

#### **Midwest Decision Sciences Institute**

Program Committee, 2011 Track Chair, 2011

#### Pacific Asia Conference on Information Systems

Program Committee for Business Intelligence, 2018 Session Chair, 2018

#### Workshop on Social Media and Computational Linguistics

Program Committee, 2010

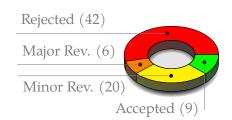
#### **Conference Reviewer**

Personal Conference Reviewing Metrics









- #SocialMedia NAACL Workshop on Social Media, 2010
- AAAI American Association for Artificial Intelligence, 2005
- AMCIS Americas Conference on Information Systems, 2006, 2014
- BPM Business Process Management, 2010, 2012
- CIKM Conference on Information Knowledge and Management, 2006
- DAFC Discourse Approaches to Financial Communication, 2014, 2017
- DELOS Workshop on User Interfaces in Digital Libraries, 2005
- DESRIST International Conference on Design Science, 2006
- DGO International Conference on Digital Government Research, 2006
- ECDL European Conference on Research & Advanced Technology for Digital Libraries, 2007
- HICSS Hawaii International Conference on System Sciences, 2013
- ICADL International Conference on Asian Digital Libraries, 2005, 2006
- icARTi International Conference on Artificial Intelligence and its Applications, 2021
- ICCCS International Conference on Computer and Computational Sciences, 2015
- ICEB International Conference on Electronic Business, 2010
- ICIS International Conference on Information Systems, 2006, 2011-2013, 2016, 2018
- ICONIC Int'l Conference on Intelligent & Innovative Computing Applications, 2018, 2020, 2022
- IIMA International Information Management Association, 2008-2010
- ISI IEEE International Conference on Intelligence and Security Informatics, 2005, 2006, 2013
- JCDL Joint Conference on Digital Libraries, 2005
- PACIS Pacific Asia Conference on Information Systems, 2018
- PSB Pacific Symposium on BioComputing, 2006
- SISC San Diego International Systems Conference, 2005
- WeB Workshop on e-Business
- WISI Workshop on Security and Intelligence Informatics, 2006
- WSA Workshop on Sciences of the Artificial, 2005

## Miscellaneous Professional Service

- IEEE Senior Member Application Review Panel, 2022
- ACM Distinguished Speakers Program, 2013 2019
- Chair of the Greater Hartford ACM Chapter, 2013 2015
- Founder of the Greater Hartford ACM Chapter
- SABR Statistical Analysis Committee Member, 2007 2010
- ICIS Volunteer, 2005
- JCDL Director of Onsite Registration Activities, 2004
- ISI Volunteer, 2004

## Curriculum Development: Degrees, Tracks, Certificates and Courses

## Degrees



#### **University of Texas at Tyler**

Masters of Science in Cybersecurity and Data Analytics

**=** 2022

▼ Tyler, Texas



#### **University of Texas at Tyler**

Bachelors of Science in Information Technology

**=** 2018

▼ Tyler, Texas



#### **University of Texas at Tyler**

Bachelors of Science in Computer Information Systems

**=** 2016

▼ Tyler, Texas



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## Tracks



#### **University of Texas at Tyler**

Business Analytics Track (Undergraduate)

**2**018

▼ Tyler, Texas



## **Central Connecticut State University**

Business Analytics Track (Graduate)

**=** 2014

■ New Britain, Connecticut



## Certificates



## **University of Texas at Tyler**

Applied Data Analytics Certificate Program (Graduate)

**2**022

■ Tyler, Texas



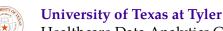
#### **University of Texas at Tyler**

Data Analytics Certificate Program (Graduate)

**2**022

**▼** Tyler, Texas

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Healthcare Data Analytics Certificate (Graduate)

**2**021

▼ Tyler, Texas



## University of Texas at Tyler

Data Analytics Certificate Program (Undergraduate)

**2**018

**▼** Tyler, Texas



## Courses



## University of Texas at Tyler

CSCI 5345 - Text Analytics

**=** 2022

▼ Tyler, Texas

This course explores the syntax, sentiment and hidden information contained in text documents.
 Students will learn how to frame text problems, choose NLP models, represent text to a computer, identify and execute machine learning techniques and evaluate model output. Includes information retrieval, natural language processing, text classification, summarization and stylometrics. Familiarity with programming is recommended.





#### University of Texas at Tyler

CSCI 5346 - Database Analytics

**=** 2022

**▼** Tyler, Texas

• This course covers the design, implementation, and use of databases for data analytic purposes. ăStudents will learn several database design techniques and be introduced to a commercial-grade database environment for data analytics.





#### **University of Texas at Tyler**

CSCI 5348 - Quantitative Investing

**=** 2022

▼ Tyler, Texas

This course provides an overview of Information System-based financial transaction systems and their
role in portfolio selection for the Financial Sector.ă Topics include portfolio selection, rebalancing
and performance monitoring from the standpoint of artificial intelligence learning techniques.ă
This course covers stock selection/filtering, building robust scalable models, identifying statistical
deviations, arbitrage market theories, managing risk and measuring the performance of various
quant models.





#### **University of Texas at Tyler**

CSCI 4385 - Information Technology Capstone

**2**018

**▼** Tyler, Texas

 An integrated perspective of the problems in today's information systems software development environment, concentration on contemporary design, methodologies, and considerations unique to users of computers and information systems.





#### **University of Texas at Tyler**

COSC 4312 & COSC 5334 - ERP Architecture Using SAP

**2**016

**●** Tyler, Texas

• Solution architects, project managers, project team members and solution consultants who want to gain a broad fundamental understanding of the core processes, business interrelations and integration of the individual business applications within the SAP ERP eco-system.





#### University of Texas at Tyler

COSC 4342 & CSCI 5342 - Sports Data Analytics

**2016 & 2018** 

Tyler, Texas

• Identifying the metrics, types of analyses and making sense of sports-related data from a managerial business perspective. Use of industry tools to gather, learn, make predictions and visualize large sports data sets.





### **University of Texas at Tyler**

COSC 4347 & COSC 5347 - Business Intelligence and Analytics

**=** 2016

**▼** Tyler, Texas

• Creating value from business data by converting it into meaningful and useful information for business decision making by using current industry business intelligence (BI) and business analytics (BA) tools and technologies.





## **Central Connecticut State University**

BUS 540 - Business Intelligence and Analytics

**=** 2014

New Britain, Connecticut

• Transforming enterprise-wide data into meaningful and useful information for business decision making using business intelligence (BI) and business analytics (BA) tools and technologies. Examining industry use of BI/BA to achieve competitive edge.





#### **Central Connecticut State University**

BUS 542 - Web Analytics

2014

New Britain, Connecticut

• Exploring key concepts and best practices of web analysis. Using web analytic tools and techniques to learn how web analytics can drive higher profits, improve customer experience, and create measurable value for businesses.





#### **Central Connecticut State University**

BUS 544 - Business Process Modeling

**2**014

New Britain, Connecticut

• Enterprise wide perspective on business processes. Modeling of business processes: analyzing, documenting, and assessing the efficiency and effectiveness of business processes. Improvement of business processes to minimize cost and maximize value creation.





#### **Central Connecticut State University**

BUS 546 - Applications of Business Analytics

2014

New Britain, Connecticut

• Business application of data mining. Understanding the importance of data mining in business and how to make business decisions using data mining results. Study of companies creating value



#### **Iona College**

IS 627 - Information Technology in Infrastructure

**=** 2010

New Rochelle, New York

With an ageing national infrastructure, we examine ways in which Information Systems can be used
to develop, maintain and improve our existing transportation, telecommunication and energy needs.
With many of these systems becoming more complex and inter-dependent, it is important to identify
the potential roles that Information Systems may play in maximizing solutions and opportunities
while minimizing situations where the introduction of Information Systems may cause unintended
consequences.

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#### **Iona College**

IS 450 - Network Construction

**=** 2008

New Rochelle, New York

 A hands-on course where students are tasked with constructing a non-trivial computer network from the ground up. Theory is blended with practice and students will gain experience is network design, construction, troubleshooting and diagnostics.





#### **Iona College**

IS 615 - Quantitative Investment

**2**008

New Rochelle, New York

This course provides an overview of Information System-based financial transaction systems and their
role in portfolio selection for the Financial Sector. Topics include portfolio selection, rebalancing
and performance monitoring from the standpoint of artificial intelligence learning techniques.
This course covers stock selection/filtering, building robust scalable models, identifying statistical
deviations, arbitrage market theories, managing risk and measuring the performance of various
quant models.



#### **Iona College**

IS 991 - Telecommunications

2008

New Rochelle, New York

This course provides a systems view of computer networking and telecommunications. Topics include
voice and data communications, networking protocols, IP telephony, wireless and mobile networks,
networking security and management.ă The course also covers networking and telecommunication
techniques, applications technology, networking topologies and architectures. Specific areas discussed
include LAN system fundamentals, such as Ethernet and token ring, WAN system fundamentals,
such as circuit-switching, packet-switching, X.25, frame relay and Asynchronous Transfer Mode.

## Collegiate Service

## University Service

- UT Tyler CIO Search Committee, 2022
- UT Tyler ORS Research Design & Analysis Lab Research Consultant, 2021 2022
- UT Tyler University Research Council, 2020 2023
- UT Tyler University Intellectual Property Committee (IPAC), 2019 2020
- UT Tyler University-Wide Endowed Professorship Committee, 2017
- UT Tyler Strategic Work Group on Community Connectivity and Partnerships, Chair, 2017
- CCSU Honors College Thesis Advisor, 2014 2015

- CCSU Information Technology Committee, 2013 2015
- CCSU-AAUP Delegate-At-Large, 2013 2015
- CSU Mentor for the McNair Scholars Program, 2011 2012
- Iona College Library Committee Member, 2008 2010
- Iona College Institutional Review Board Member, 2009 2010
- Iona College Presidential/Deans Scholarship Interviewer, 2008, 2009
- Arizona Graduate and Professional Student Council Representative, 2006 2007
- Arizona Graduate and Professional Student Council, Travel Grant Judge, 2006
- Akron Graduation Marshall for the Faculty, 2002 2003
- Akron Scholarship Interviewer, 2003

## College Service

- UT Tyler COB Graduate Curriculum Committee, 2019 2025
- UT Tyler COB Endowment Committee, 2019 2023
- UT Tyler COB Graduate Programs Task Force, 2019
- UT Tyler COB Undergraduate Curriculum Committee, 2019 2023
- UT Tyler COB Faculty Awards Committee, 2015 2018
- UT Tyler COB Assurance of Learning Committee, 2015 2019
- CCSU School of Business Bylaws Committee, 2015
- Iona College Hagan School of Business Strategic Vision Committee Member, 2009 2010
- Iona College Hagan School of Business Curriculum Committee Member, 2009 2010
- Iona College Hagan School of Business Freshman Advisor, 2007 2010
- Arizona Eller College Admissions Interviewer, 2006, 2007
- Akron CBA Computer Operations Committee, 2000 2001

## Department Service

- UT Tyler CS Dept. Program Co-Coordinator MS-CSDA, 2022 Present
- UT Tyler CS Dept. Admissions Committee, Chair MS-CSDA, 2022 Present
- UT Tyler Accounting, Finance & Business Law Dept. Promotion & Tenure Committee, Chair, 2021
- UT Tyler CS Dept. Promotion & Tenure Committee, 2020 2022
- UT Tyler CS Dept. Houston IT Program Task Force, 2019
- UT Tyler CS Dept. Program Coordinator BS-CIS, 2019 Present
- UT Tyler CS Dept. Faculty Search Committee, Chair, 2018, 2022
- UT Tyler CS Dept. Faculty Search Committee, Member, 2016, 2022, 2023
- UT Tyler CS Dept. Chandler Professorship Committee, 2016
- CCSU MIS Dept. Student Advisor, 2013 2015
- CCSU MIS Club Faculty Advisor, 2013 2015
- CCSU MIS Dept. Open House Delegate, 2013 2015
- CCSU MIS Dept. Graduation Representative, 2014 2015
- CCSU MIS Dept. Bylaws Committee Chair, 2013 2014
- CCSU MIS Dept. The Travelers Case Competition Advisor, 2013, 2014
- CSU CIS Dept. IST 203 Textbook Selection Committee, 2011
- Iona College IS Dept. AACSB Self-Study Committee Chair, 2008 2009
- Iona College IS Dept. Liaison for Campus Day for Accepted Students, 2009
- Iona College IS Dept. Textbook Selection Committee, 2008 2010
- Iona College IS Dept. Director of the IS Computer Lab, 2007 2010
- Arizona MISA Test Review Volunteer Instructor, 2004 2005
- Akron Quasi-Academic Advisor for SITE Student Group, 2002 2003

## Research Lab Service

- Arizona AI Lab Recruiting Leader, 2004 2007
- Arizona AI Lab PhD Seminar Coordinator, 2004 2006

## Organized Workshops for Students

- Data Science Q&A with Alumni Panel, March 25, 2022
- Life After Graduation Q&A with Alumni Panel, March 25, 2022
- Cybersecurity Q&A with Alumni Panel, March 25, 2022
- Women in Computing Q&A with Alumni Panel, March 24, 2022
- Certifications, Are They Worth It Q&A with Alumni Panel, March 24, 2022
- Software Developer Q&A with Alumni Panel, March 24, 2022
- Let's TACO About Your Future Alumni Panel, October 15, 2021

## Student Competition Mentoring

- Traveler's Business Case Competition, November 7, 2014
- Traveler's Business Case Competition, November 1, 2013

## Community Service

- Board Member Lone Pine WSC, 2023 Present
- Member Palestine/Anderson County Amateur Radio Club, 2020 2021
- Member Elks Club #215, 2015 2021
- Officer of Elks Club #957, 2014 2015
- Member Elks Club #957, 2012 2015
- Big Brothers/Big Sisters Volunteer, 2000 2003, 2011 2012
- Shaker LaunchHouse Mentor, 2011 2012
- The Schumaker Foundation Inc. Board of Governors, 2008 2012
- Adopt-A-Spot Volunteer Derby, CT, 2008 2010
- $\phi$ KT Board of Governors, A $\phi$  Chapter, 1999 2003

#### References

Tim Arndt	Tomasz Jarmoszko
Cleveland State	CCSU
Leonard Brown	Chester Labedz Jr.
UT Tyler	CCSU
Thomas Calderon	Christopher Lee
University of Akron	CCSU
Michael Chau	Paul Lowry
Hong Kong University	Virginia Tech
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