Jeremy J. Shafer Curriculum Vitae

Jeremy.Shafer@temple.edu Management Information Systems Department

Temple University

community.mis.temple.edu/jshafer 209d Speakman Hall

1810 North 13th Street

Philadelphia, PA 19122-6083

phone: (215) 204-6432

HIGHLIGHTS

- My academic career began in the Fall of 2014. My attraction to higher education began well before that time. Universities are interesting places. They are where people go to better themselves. They are inherently fertile environments for technological innovation and societal change; and they are microcosms of the larger world. Temple University is no exception to these truths, and prior to teaching I found some significance in believing that the technology projects I led contributed to the educational experience of students. My transition to a full-time academic role is both the fulfillment, and ongoing extension of that initial attraction. I now relish the opportunity to learn, grow, explore new technologies, and to share my enthusiasms with my students. Understanding how to motivate and instruct my students is a source of perpetual fascination. Seeing my students thrive in their vocational endeavors is a source of recurring satisfaction.
- In the Fall of 2014, I deployed a server used to host student programming assignments and projects (misdemo.temple.edu). It continues to play an important role in two MIS courses.
 I continue to administer this system, as it is closely integrated with the evolving needs of the MIS department, students, and instructors.
- In the Fall of 2015, I implemented the Grade Rigor Ratio (GRR) in the MIS Department. This KPI acts as a measure for course rigor and has been shown to be useful in multiple contexts. It gives MIS faculty and MIS administration a convention for discussing rigor and expected outcomes. I continue to maintain a seven-year history of these metrics.
- In Spring of 2018, I initiated many of the conversations which ultimately lead to a thematic revision of the entire MIS curriculum in AY 2019-2020.
 - In 2018 I challenged the approach to web development that was being taught in the department. This was initially couched in terms of programming language selection, and the desire to retire one language in favor of another. The ultimate result was much more significant.
 - Along with other MIS faculty, I interviewed multiple representatives from industry, to understand the needs and expectations of varied employers.
 - I also identified the Stack Overflow Developer Survey as an essential source for insight into the technology industries. This survey is the most comprehensive instrument of its kind available to the IT industry.

- In the Fall of 2018, David Schuff invited me to part of the MIS "Vision Team" which
 oversaw the revisions to all the MIS core courses. This entailed reviewing all the
 learning objectives and proposed changes for specific course redesigns.
- The ultimate result was a thematic shift in the entire MIS curriculum, replacing monolithic legacy concepts with web services, cloud computing, the API economy, and the programming languages and technologies that support those things. This distinctive theme makes Temple's MIS program both unique and competitive compared to other MIS programs world-wide.
- The courses I coordinate were, consequently, the first to embrace and implement these changes.
- Beginning in the Fall of 2018 I managed multiple Digital Innovation Foundry (DIF) projects.
 The most recent project being an Internet of Things (IoT) project. In this project I
 advised/mentored students through the proposal of a solution, and the construction of a
 functional prototype.
 - Presented to AmerisourceBergen Corporation (AB) leadership on 8/26/2022 and again on 10/5/2022.
 - AmerisourceBergen is one of the "big three" distributors of pharmaceuticals in the United States, ranked #8 in the Fortune 500 and is Pennsylvania's largest company.
- In the Spring of 2019, I was the Program Chair for the 2019 AIS Student Chapter Leadership Conference, held at Temple University. The conference had 181 non-Temple attendees from 33 schools across the country and Europe.
- In the Fall of 2019, I created the MIS Helpdesk for Coding in the MIS Department at Temple University. This service is designed to support MIS students who are new to coding.
 - MIS students working as Helpdesk consultants strengthen their own skills as they
 instruct their peers. Working as a consultant is a signal of both interest and aptitude
 in coding.
 - The MIS Helpdesk responds to roughly 50 inquiries each semester and exists as a supplement to course specific resources.
 - The MIS Helpdesk for Coding, by its very existence, conveys the department's commitment to students who need help, and the importance of coding itself.
- In the Spring of 2023, I was promoted to Associate Professor of Practice.
- In the Spring of 2024, I created the first undergraduate course in Artificial Intelligence to be offered at the Fox School of Business.
- In the Spring of 2024, I contributed content to the NSF Cyber AI Workshop held in Louisville Kentucky. The goal of the workshop was to collect and assess contributions from multiple educators from centers of academic excellence. Content contributions formed the basis for a new program of study which will contribute AI related material to the existing NICE Workforce Framework for Cybersecurity, and the Defense Cybersecurity Framework. This is a preliminary step towards the creation of a Center of Academic Excellence in AI by the NSF.
- In the Fall of 2024, I co-lead a departmental conversation on developing instructional practices to promote the virtues of curiosity, critical thinking, and perseverance in MIS students.
- Prior to teaching I was an IT professional with over 20 years of experience. I worked as both a manager and a hands-on technical resource. I led multiple projects that applied

technology to improve teaching, learning and the student experience at Temple University. These projects included:

- Created Temple's Online Application for Admission for both undergraduate and graduate applicants. Both solutions were in service for nearly a decade.
- o Implemented the electronic payment of admissions fees.
- Construction and deployment of the Annual Report of Faculty Activity (AROFA) which is still in use.
- o Integration and development of the WebEx platform. This integration project provided Temple with its first university-wide video conferencing platform.
- Worked CIS IST department faculty and created a remote development environment exclusively for STEM students working on application development projects.
- The adoption, integration, migration, and maintenance of Temple's Gmail platform.
 Temple University was an early adopter of hosted email in 2006, and I led this effort.
- Multiple departmental web sites and design projects.

EDUCATION

Master of Science, Management Information Systems (2009)

Temple University, Philadelphia, Pennsylvania Degree awarded: December 1, 2009

Bachelor of Science, Computer Science (1991)

SUNY Brockport, Brockport, New York Degree awarded: May 19, 1991 Graduated Magna Cum Laude

ACADEMIC EXPERIENCE

Temple University (September 2013 – present)

Department of Management Information Systems

Associate Professor of Practice (July 2023-present) Assistant Professor of Practice (July 2014-June 2023) Adjunct Professor (January 2013-May 2014)

PROFESSIONAL CERTIFICATIONS

•	Udemy 2024	ChatGPT: Complete ChatGPT Course for Work (Ethically)!
•	IOTF 2022	Cloud Credential Council / Internet of Things Foundation Certification
•	Fox Online	Teaching Certificate, March 7, 2019 (Renewed 5/23/2022)
•	ITIL2007	ISEB/EXIN Foundation Certificate in IT Service Management
•	MCSD 2001	Microsoft Certified Solutions Developer (Visual Basic / SQL Server)
•	CNA 1997	Certified Netware Administrator for Netware 4.1

ORGANIZATION MEMBERSHIPS

- ISACA (member), June 2024 -- present
- IEEE (member), November 2020 December 2023
- Association for Information Systems (member), August 2017 present
- AIS Student Chapters Advisory Board, August 2017- July 2019

AWARDS AND RECOGNITIONS

- Andrisani-Frank Undergraduate Teaching Award, May 17, 2023
 - This award is presented to a faculty member who demonstrates a commitment to use the latest technology, improve the communication skills of undergraduate students, attend to the educational development of undergraduate students outside the classroom, and build bridges between students and the business community.
- Teach Access Faculty Grant, May 15, 2023
 - Awarded a \$5,000 grant to advance the teaching of the design and development of accessible technologies.
 - Teach Access is a non-profit 501(c)(3) organization collaborating with education, industry, and disability advocacy organizations to address the critical need to enhance students' understanding of digital accessibility as they learn to design, develop, and build new technologies with the needs of people with disabilities in mind.
- MIS Faculty Leadership Award, April 5, 2019
 - Awarded to faculty who makes a significant contribution to the students and extended community of the MIS department
- Best Paper Finalist, December 4, 2018
 - Awarded by Jan Seruga (Research Chair) and Asli Yagmur Akbulut (President),
 Association for Information Systems, IS Education SIG
- AIS Chapter Advisor of the Year, April 13, 2018
 - Awarded by Rhonda Syler, AIS Vice President for Student Chapters
- MIS Faculty Teaching Award, April 10, 2018 (Spring and Fall 2017 semesters)
- MIS Faculty Leadership Award, April 5, 2016

RESEARCH CONTRIBUTIONS

CONFERENCE PROCEEDINGS, PAPERS AND PRESENTATIONS:

Shafer, Jeremy and Lavin, Amy, "Al and ML in the Workplace: Introducing an Al Elective" (2024). AMCIS 2024 TREOs. 94.

https://aisel.aisnet.org/treos amcis2024/94

Shafer, Jeremy, "Why I "unflipped" my STEM classroom" (2024). AMCIS 2024 TREOs. 16. https://aisel.aisnet.org/treos_amcis2024/16

Doyle, M., Shafer, J., "Grade-O-Matic: A Tool to Test and Grade Programs", Completed Research Paper, in the Proceedings of the 2023 AIS SIGED International Conference on Information Systems Education and Research, Panama City, Panama, August 10-12, 2023. (*Presenter*) https://aisel.aisnet.org/amcis2023/sig_ed/sig_ed/7

Schuff, D., Shafer, J., "API-based Web Development", Presentation, Presented at the IT Teaching Workshop, University of Rochester, Simon Business School, Rochester, New York, May 28, 2021. (*Presenter*)

https://simon.rochester.edu/research-conference/2021-it-teaching-workshop

Shafer, J., "A Framework for the Qualitative Comparison of Sentiment API Service Providers", Completed research paper, in the Proceedings of the National Association of Business, Economics and Technology, State College, Pennsylvania, October 22-23, 2020 (*Presenter*) http://www.nabet.us/proceedings-archive/NABET-Proceedings-2020.pdf

Doyle, M., Shafer, J., "The Impact of Cold-Calling on Student Learning and Student Satisfaction", TREO Talk Paper, in the Proceedings of the American Conference on Information Systems, Cancun, Mexico, August 14-18, 2019. (*Presenter*) https://aisel.aisnet.org/cgi/viewcontent.cgi?article=1518&context=amcis2019

Shafer, J., "A Quantitative Consideration of Rigor and Retaliation: Investigating Student Evaluations of Teaching, Rigor, and Grade Distributions", Completed Research Paper, in the Proceedings of the 2018 AIS SIGED International Conference on Information Systems Education and Research, San Francisco, California, December 12-14, 2018. (*Presenter*) https://aisel.aisnet.org/siged2018/23

INVITED PRESENTATIONS:

Mandviwalla, M., Shafer, J., "Serverless and APIs: Rethinking Curriculum in Higher Education", Presentation, Presented at the IT Teaching Workshop, Boston University, Questrom School of Business, Boston, Massachusetts, June 1, 2018. (*Presenter*)

Shafer, J., "An introduction to Hadoop and HIVE", Presentation, Presented at the AIS Student Chapter at Temple University, 2017. (Presenter)

Shafer, J., "A brief history of Linux", Presentation, Presented at the AIS Student Chapter at Temple University, 2015. (Presenter)

Shafer, J., "A gentle introduction to Bootstrap", Presentation, Presented at the AIS Student Chapter at Temple University, 2015. (Presenter)

TEACHING EXPERIENCE

MIS2402, Data-Centric Application Development (Developed course, Course Coordinator)

This hands-on programming course uses open-source software to provide students with an understanding of programming fundamentals. This class is designed to develop individual proficiency and reward individual achievement as students develop the skills necessary to create solutions that interact with web APIs.

MIS3502, Application Integration and Evaluation (Developed course, Course Coordinator)

Use concepts of application integration to develop data driven software applications. Design the system architecture for an n-tier application. Learn how to integrate existing applications to produce new capabilities. Identify the technical and process issues of integrating a new application into the existing application structure. Relate software components such as middleware (specifically, a REST API) to the overall information architecture and apply software components to create client and server-based applications.

MIS2502, Data Analytics (Instructor)

Core course for the undergraduate MIS major and minor. Analyze data and learn how to present insights from business data. Analyze, model, and design database centric solutions for organizations. Create data models and data warehouses based on business rules. Learn how to operate and manage a database system and structured query language (SQL). Source traditional and new data types and apply data mining and visualization to generate business intelligence.

MIS3580, Special Topics, AI and ML in the Workplace (Instructor)

This special topics course is designed to provide business students with a foundational understanding of Artificial Intelligence (AI) and Machine Learning (ML) concepts and their applications in a business context. Through a combination of theoretical learning, practical applications, and case studies, students will develop the skills necessary to leverage AI/ML tools to solve real-world business problems. Offered for the first time in the Spring 2024 semester, this is the first undergraduate elective in the Fox School of Business at Temple University to focus exclusively on Artificial Intelligence topics. Effective Fall 2024, this course has become the elective, MIS3536 Information Systems Innovation with A.I.

STUDENT TEACHING EVALUATIONS

(Rating are based on the evaluation's "overall rating" question)

<u>. </u>	<u> </u>	·	
Course	Course Title	Term	Rating
Number			
MIS3580	Al and ML in the Workplace	Spring 2024	4.4 out of 5
MIS3502	Web Service Programming	Spring 2024	4.4 out of 5
MIS3502	Web Service Programming	Spring 2024	4.4 out of 5
MIS2502	Data and Analytics	Spring 2024	4.4 out of 5
MIS2402	Web Application Development	Spring 2024	4.4 out of 5
MIS2502	Data and Analytics	Fall 2023	4.4 out of 5
MIS2402	Web Application Development	Fall 2023	4.7 out of 5
MIS3502	Web Service Programming	Fall 2023	4.0 out of 5
MIS3502	Web Service Programming	Fall 2023	4.5 out of 5
MIS2502	Data and Analytics	Spring 2023	4.5 out of 5
MIS2402	Web Application Development	Spring 2023	3.6 out of 5

Number Web Service Programming Spring 2023 4.4 out of 5 MIS3502 Web Service Programming Spring 2023 4.4 out of 5 MIS2502 Data and Analytics Fall 2022 4.2 out of 5 MIS2402 Web Application Development Fall 2022 4.8 out of 5 MIS3502 Web Service Programming Fall 2022 4.3 out of 5 MIS3502 Data and Analytics Spring 2022 4.3 out of 5 MIS2502 Data and Analytics Spring 2022 3.7 out of 5 MIS3502 Web Service Programming Spring 2022 3.9 out of 5 MIS3502 Web Service Programming Spring 2022 3.9 out of 5 MIS3502 Web Service Programming Spring 2022 3.9 out of 5 MIS3502 Web Service Programming Fall 2021 4.4 out of 5 MIS3502 Web Service Programming Fall 2021 4.4 out of 5 MIS3502 Web Service Programming Fall 2021 4.7 out of 5 MIS3502 Web Application Development Spring 2021 4.6 out of 5 MIS3502 We	Course	Course Title	Term	Rating
MIS3502 Web Service Programming Spring 2023 4.4 out of 5 MIS2502 Data and Analytics Fall 2022 4.2 out of 5 MIS2402 Web Application Development Fall 2022 4.3 out of 5 MIS3502 Web Service Programming Fall 2022 4.3 out of 5 MIS3502 Web Service Programming Fall 2022 4.3 out of 5 MIS2502 Data and Analytics Spring 2022 3.7 out of 5 MIS3502 Web Service Programming Spring 2022 3.9 out of 5 MIS3502 Web Service Programming Spring 2022 3.9 out of 5 MIS3502 Web Service Programming Fall 2021 3.9 out of 5 MIS3502 Web Service Programming Fall 2021 3.9 out of 5 MIS3502 Web Service Programming Fall 2021 4.0 out of 5 MIS3502 Web Service Programming Fall 2021 4.7 out of 5 MIS3502 Web Application Development Spring 2021 4.6 out of 5 MIS2502 Data Analytics Spring 2021 4.7 out of 5 MIS3502 Web Servi	Number			
MIS2502 Data and Analytics Fall 2022 4.2 out of 5 MIS2402 Web Application Development Fall 2022 4.8 out of 5 MIS3502 Web Service Programming Fall 2022 4.3 out of 5 MIS3502 Web Service Programming Fall 2022 4.3 out of 5 MIS2502 Data and Analytics Spring 2022 3.7 out of 5 MIS3502 Web Service Programming Spring 2022 3.9 out of 5 MIS3502 Web Service Programming Spring 2022 3.9 out of 5 MIS3502 Web Service Programming Fall 2021 3.9 out of 5 MIS3502 Web Service Programming Fall 2021 5.0 out of 5 MIS3502 Web Service Programming Fall 2021 4.0 out of 5 MIS3502 Web Service Programming Fall 2021 4.7 out of 5 MIS3502 Web Application Development Spring 2021 4.7 out of 5 MIS2402 Web Application Development Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Spring 2021 4.7 out of 5 MIS3502	MIS3502	Web Service Programming	Spring 2023	4.4 out of 5
MIS2402 Web Application Development Fall 2022 4.8 out of 5 MIS3502 Web Service Programming Fall 2022 4.3 out of 5 MIS3502 Web Service Programming Fall 2022 4.3 out of 5 MIS2502 Data and Analytics Spring 2022 4.5 out of 5 MIS3502 Web Service Programming Spring 2022 3.9 out of 5 MIS3502 Web Service Programming Spring 2022 3.9 out of 5 MIS3502 Web Service Programming Fall 2021 5.0 out of 5 MIS3502 Web Service Programming Fall 2021 5.0 out of 5 MIS3502 Web Service Programming Fall 2021 4.4 out of 5 MIS3502 Web Service Programming Fall 2021 4.7 out of 5 MIS3502 Web Application Development Spring 2021 4.6 out of 5 MIS2402 Web Application Development Spring 2021 4.6 out of 5 MIS3502 Web Service Programming Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Spring 2021 4.7 out of 5 MIS3502	MIS3502	Web Service Programming	Spring 2023	4.4 out of 5
MIS3502 Web Service Programming Fall 2022 4.3 out of 5 MIS3502 Web Service Programming Fall 2022 4.3 out of 5 MIS2502 Data and Analytics Spring 2022 3.7 out of 5 MIS2502 Data and Analytics Spring 2022 3.7 out of 5 MIS3502 Web Service Programming Spring 2022 3.9 out of 5 MIS3502 Web Service Programming Spring 2022 3.9 out of 5 MIS3502 Web Service Programming Fall 2021 5.0 out of 5 MIS3502 Web Service Programming Fall 2021 5.0 out of 5 MIS3502 Web Service Programming Fall 2021 4.4 out of 5 MIS3502 Web Service Programming Fall 2021 4.7 out of 5 MIS3502 Web Service Programming Fall 2021 4.7 out of 5 MIS3502 Web Application Development Spring 2021 4.6 out of 5 MIS2502 Data Analytics Spring 2021 4.0 out of 5 MIS3502 Web Service Programming Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Fall 2020 4.7 out of 5 MIS3502 Web Service Programming Fall 2020 5.0 out of 5 MIS3502 Web Service Programming Fall 2020 5.0 out of 5 MIS3502 Web Service Programming Fall 2020 4.7 out of 5 MIS3502 Application Integration and Evaluation Spring 2020 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.7 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2020 4.9 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application	MIS2502	Data and Analytics	Fall 2022	4.2 out of 5
MIS3502 Web Service Programming Fall 2022 4.3 out of 5 MIS2502 Data and Analytics Spring 2022 4.5 out of 5 MIS2502 Data and Analytics Spring 2022 3.7 out of 5 MIS3502 Web Service Programming Spring 2022 3.9 out of 5 MIS3502 Web Service Programming Fall 2021 5.0 out of 5 MIS3502 Web Service Programming Fall 2021 4.4 out of 5 MIS3502 Web Service Programming Fall 2021 4.7 out of 5 MIS3502 Web Service Programming Fall 2021 4.7 out of 5 MIS3502 Web Service Programming Fall 2021 4.7 out of 5 MIS3502 Web Application Development Spring 2021 4.6 out of 5 MIS2502 Data Analytics Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Fall 2020 4.7 out of 5 MIS3502 Web Service Programming Fall 2020 4.7 out of 5 MIS3502 Web Service P	MIS2402	Web Application Development	Fall 2022	4.8 out of 5
MIS2502 Data and Analytics Spring 2022 4.5 out of 5 MIS2502 Data and Analytics Spring 2022 3.7 out of 5 MIS3502 Web Service Programming Spring 2022 3.9 out of 5 MIS3502 Web Service Programming Fall 2021 5.0 out of 5 MIS3502 Web Service Programming Fall 2021 5.0 out of 5 MIS3502 Web Service Programming Fall 2021 4.4 out of 5 MIS3502 Web Service Programming Fall 2021 4.7 out of 5 MIS3502 Web Service Programming Fall 2021 4.7 out of 5 MIS2505 Data Science Summer II 4.4 out of 5 MIS2506 Data Analytics Spring 2021 4.6 out of 5 MIS2502 Data Analytics Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Fall 2020 4.7 out of 5 MIS3502 Web Service Programming Fall 2020 4.7 out of 5 MIS3502 Application Integration and Evaluatio	MIS3502	Web Service Programming	Fall 2022	4.3 out of 5
MIS2502 Data and Analytics Spring 2022 3.7 out of 5 MIS3502 Web Service Programming Spring 2022 3.9 out of 5 MIS3502 Web Service Programming Spring 2022 3.9 out of 5 MIS3502 Web Service Programming Fall 2021 5.0 out of 5 MIS3502 Web Service Programming Fall 2021 4.4 out of 5 MIS3502 Web Service Programming Fall 2021 4.7 out of 5 MIS0855 Data Science Summer II 4.4 out of 5 MIS2402 Web Application Development Spring 2021 4.6 out of 5 MIS2502 Data Analytics Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Fall 2020 4.7 out of 5 MIS3502 Web Service Programming Fall 2020 5.0 out of 5 MIS3502 Web Service Programming Fall 2020 4.7 out of 5 MIS3502 Application Integration and Evaluation Spring 2020 4.5 out of 5 MIS3502 Ap	MIS3502	Web Service Programming	Fall 2022	4.3 out of 5
MIS3502 Web Service Programming Spring 2022 3.9 out of 5 MIS3502 Web Service Programming Spring 2022 3.9 out of 5 MIS3502 Web Service Programming Fall 2021 5.0 out of 5 MIS3502 Web Service Programming Fall 2021 4.4 out of 5 MIS3502 Web Service Programming Fall 2021 4.7 out of 5 MIS3502 Web Service Programming Fall 2021 4.7 out of 5 MIS0855 Data Science Summer II 4.4 out of 5 MIS2402 Web Application Development Spring 2021 4.6 out of 5 MIS2502 Data Analytics Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Fall 2020 4.7 out of 5 MIS3502 Web Service Programming Fall 2020 5.0 out of 5 MIS3502 Web Service Programming Fall 2020 4.4 out of 5 MIS3502 Web Service Programming Fall 2020 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2020 4.5 out of 5 MIS2502 Data Analytics Spring 2020 4.7 out of 5 MIS2502 Data Analytics Spring 2020 4.7 out of 5 MIS2502 Data Analytics Spring 2020 4.7 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.7 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.7 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5	MIS2502	Data and Analytics	Spring 2022	4.5 out of 5
MIS3502 Web Service Programming Fall 2021 5.0 out of 5 MIS3502 Web Service Programming Fall 2021 5.0 out of 5 MIS3502 Web Service Programming Fall 2021 4.4 out of 5 MIS3502 Web Service Programming Fall 2021 4.7 out of 5 MIS3502 Web Service Programming Fall 2021 4.7 out of 5 MIS3502 Web Application Development Spring 2021 4.6 out of 5 MIS2402 Web Application Development Spring 2021 4.1 out of 5 MIS3502 Web Service Programming Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Fall 2020 4.7 out of 5 MIS3502 Web Service Programming Fall 2020 5.0 out of 5 MIS3502 Web Service Programming Fall 2020 5.0 out of 5 MIS3502 Web Service Programming Fall 2020 4.4 out of 5 MIS3502 Application Integration and Evaluation Spring 2020 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2020 4.7 out of 5 MIS2502 Data Analytics Spring 2020 4.7 out of 5 MIS2502 Data Analytics Spring 2020 4.7 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.7 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.7 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5	MIS2502	Data and Analytics	Spring 2022	3.7 out of 5
MIS3502 Web Service Programming Fall 2021 5.0 out of 5 MIS3502 Web Service Programming Fall 2021 4.4 out of 5 MIS3502 Web Service Programming Fall 2021 4.7 out of 5 MIS0855 Data Science Summer II 4.4 out of 5 MIS2402 Web Application Development Spring 2021 4.6 out of 5 MIS2502 Data Analytics Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Fall 2020 4.7 out of 5 MIS3502 Web Service Programming Fall 2020 5.0 out of 5 MIS3502 Web Service Programming Fall 2020 4.4 out of 5 MIS3502 Web Service Programming Fall 2020 4.4 out of 5 MIS3502 Application Integration and Evaluation Spring 2020 4.5 out of 5 MIS3502 Data Analytics Spring 2020 4.7 out of 5 MIS2502 Data Analytics Spring 2020 4.4 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.7 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.7 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 3.8 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5	MIS3502	Web Service Programming	Spring 2022	3.9 out of 5
MIS3502 Web Service Programming Fall 2021 4.4 out of 5 MIS3502 Web Service Programming Fall 2021 4.7 out of 5 MIS0855 Data Science Summer II 4.4 out of 5 MIS2402 Web Application Development Spring 2021 4.6 out of 5 MIS2502 Data Analytics Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Fall 2020 4.7 out of 5 MIS3502 Web Service Programming Fall 2020 5.0 out of 5 MIS3502 Web Service Programming Fall 2020 5.0 out of 5 MIS3502 Web Service Programming Fall 2020 4.4 out of 5 MIS3502 Application Integration and Evaluation Spring 2020 4.5 out of 5 MIS3502 Data Analytics Spring 2020 4.7 out of 5 MIS2502 Data Analytics Spring 2020 4.4 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.7 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 3.8 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5	MIS3502	Web Service Programming	Spring 2022	3.9 out of 5
MIS3502 Web Service Programming Fall 2021 4.7 out of 5 MIS0855 Data Science Summer II 4.4 out of 5 2021 MIS2402 Web Application Development Spring 2021 4.6 out of 5 MIS2502 Data Analytics Spring 2021 4.1 out of 5 MIS3502 Web Service Programming Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Fall 2020 4.7 out of 5 MIS3502 Web Service Programming Fall 2020 5.0 out of 5 MIS3502 Web Service Programming Fall 2020 5.0 out of 5 MIS3502 Web Service Programming Fall 2020 4.4 out of 5 MIS3502 Application Integration and Evaluation Spring 2020 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2020 4.7 out of 5 MIS2502 Data Analytics Spring 2020 4.4 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.7 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.6 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 3.8 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5	MIS3502	Web Service Programming	Fall 2021	5.0 out of 5
MIS0855 Data Science Summer II 2021 MIS2402 Web Application Development Spring 2021 4.6 out of 5 MIS2502 Data Analytics Spring 2021 4.1 out of 5 MIS3502 Web Service Programming Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Fall 2020 4.7 out of 5 MIS3502 Web Service Programming Fall 2020 5.0 out of 5 MIS3502 Web Service Programming Fall 2020 4.4 out of 5 MIS3502 Web Service Programming Fall 2020 4.4 out of 5 MIS3502 Application Integration and Evaluation Spring 2020 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2020 4.7 out of 5 MIS2502 Data Analytics Spring 2020 4.4 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.7 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 3.8 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5	MIS3502	Web Service Programming	Fall 2021	4.4 out of 5
MIS2402 Web Application Development Spring 2021 4.6 out of 5 MIS2502 Data Analytics Spring 2021 4.1 out of 5 MIS3502 Web Service Programming Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Fall 2020 4.7 out of 5 MIS3502 Web Service Programming Fall 2020 5.0 out of 5 MIS3502 Web Service Programming Fall 2020 5.0 out of 5 MIS3502 Web Service Programming Fall 2020 4.4 out of 5 MIS3502 Application Integration and Evaluation Spring 2020 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2020 4.7 out of 5 MIS2502 Data Analytics Spring 2020 4.4 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.7 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.6 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration Development Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration Development Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5	MIS3502	Web Service Programming	Fall 2021	4.7 out of 5
MIS2502 Data Analytics Spring 2021 4.1 out of 5 MIS3502 Web Service Programming Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Fall 2020 4.7 out of 5 MIS3502 Web Service Programming Fall 2020 5.0 out of 5 MIS3502 Web Service Programming Fall 2020 4.4 out of 5 MIS3502 Application Integration and Evaluation Spring 2020 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2020 4.7 out of 5 MIS2502 Data Analytics Spring 2020 4.4 out of 5 MIS2502 Data Analytics Spring 2020 4.0 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.7 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.6 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration Development Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 3.8 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5	MIS0855	Data Science		4.4 out of 5
MIS3502 Web Service Programming Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Spring 2021 4.7 out of 5 MIS3502 Web Service Programming Fall 2020 4.7 out of 5 MIS3502 Web Service Programming Fall 2020 5.0 out of 5 MIS3502 Web Service Programming Fall 2020 4.4 out of 5 MIS3502 Application Integration and Evaluation Spring 2020 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2020 4.7 out of 5 MIS2502 Data Analytics Spring 2020 4.4 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.7 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.6 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration Development Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.8 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.8 out of 5 MIS3502 Application Integration Development Spring 2019 4.5 out of 5 MIS3502 Application Integration Development Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 3.8 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5	MIS2402	Web Application Development	Spring 2021	4.6 out of 5
MIS3502 Web Service Programming Fall 2020 4.7 out of 5 MIS3502 Web Service Programming Fall 2020 5.0 out of 5 MIS3502 Web Service Programming Fall 2020 5.0 out of 5 MIS3502 Web Service Programming Fall 2020 4.4 out of 5 MIS3502 Application Integration and Evaluation Spring 2020 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2020 4.7 out of 5 MIS2502 Data Analytics Spring 2020 4.4 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.7 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.6 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration Development Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.8 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.8 out of 5 MIS3502 Application Integration Development Spring 2019 4.5 out of 5 MIS3502 Application Integration Development Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 3.8 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5	MIS2502	Data Analytics	Spring 2021	4.1 out of 5
MIS3502 Web Service Programming Fall 2020 4.7 out of 5 MIS3502 Web Service Programming Fall 2020 5.0 out of 5 MIS3502 Web Service Programming Fall 2020 4.4 out of 5 MIS3502 Application Integration and Evaluation Spring 2020 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2020 4.7 out of 5 MIS2502 Data Analytics Spring 2020 4.4 out of 5 MIS2502 Data Analytics Spring 2020 4.0 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.7 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.6 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration Development Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.8 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.8 out of 5 MIS3502 Application Integration Development Spring 2019 4.5 out of 5 MIS3502 Application Integration Development Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 3.8 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5	MIS3502	Web Service Programming	Spring 2021	4.7 out of 5
MIS3502 Web Service Programming Fall 2020 5.0 out of 5 MIS3502 Web Service Programming Fall 2020 4.4 out of 5 MIS3502 Application Integration and Evaluation Spring 2020 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2020 4.7 out of 5 MIS2502 Data Analytics Spring 2020 4.4 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.7 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.6 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration Development Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration Development Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 3.8 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5	MIS3502	Web Service Programming	Spring 2021	4.7 out of 5
MIS3502 Web Service Programming Fall 2020 4.4 out of 5 MIS3502 Application Integration and Evaluation Spring 2020 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2020 4.7 out of 5 MIS2502 Data Analytics Spring 2020 4.4 out of 5 MIS3502 Data Analytics Spring 2020 4.0 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.7 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.6 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Data-Centric Application Development Fall 2019 4.1 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.8 out of 5 MIS3502 Application Integration Development Spring 2019 4.5 out of 5 MIS3502 Application Integration Development Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 3.8 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5	MIS3502	Web Service Programming	Fall 2020	4.7 out of 5
MIS3502 Application Integration and Evaluation Spring 2020 4.5 out of 5 MIS2502 Data Analytics Spring 2020 4.4 out of 5 MIS2502 Data Analytics Spring 2020 4.0 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.7 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.6 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS3502 Application Integration Development Fall 2019 4.5 out of 5 MIS3502 Application Integration Development Fall 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.8 out of 5 MIS3502 Data-Centric Application Development Spring 2019 4.5 out of 5 MIS3502 Application Integration Development Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 3.8 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5	MIS3502	Web Service Programming	Fall 2020	5.0 out of 5
MIS3502 Application Integration and Evaluation Spring 2020 4.7 out of 5 MIS2502 Data Analytics Spring 2020 4.4 out of 5 MIS2502 Data Analytics Spring 2020 4.0 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.7 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.6 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS2402 Data-Centric Application Development Fall 2019 4.1 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.8 out of 5 MIS2402 Data-Centric Application Development Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 3.8 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5	MIS3502	Web Service Programming	Fall 2020	4.4 out of 5
MIS2502Data AnalyticsSpring 20204.4 out of 5MIS2502Data AnalyticsSpring 20204.0 out of 5MIS3502Application Integration and EvaluationFall 20194.7 out of 5MIS3502Application Integration and EvaluationFall 20194.6 out of 5MIS3502Application Integration and EvaluationFall 20194.5 out of 5MIS2402Data-Centric Application DevelopmentFall 20194.1 out of 5MIS3502Application Integration and EvaluationSpring 20194.5 out of 5MIS2402Data-Centric Application DevelopmentSpring 20194.5 out of 5MIS3502Application Integration and EvaluationFall 20183.8 out of 5MIS3502Application Integration and EvaluationFall 20184.2 out of 5MIS3502Application Integration and EvaluationFall 20184.3 out of 5	MIS3502	Application Integration and Evaluation	Spring 2020	4.5 out of 5
MIS2502 Data Analytics Spring 2020 4.0 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.7 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.6 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS2402 Data-Centric Application Development Fall 2019 4.1 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.8 out of 5 MIS2402 Data-Centric Application Development Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 3.8 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5	MIS3502	Application Integration and Evaluation	Spring 2020	4.7 out of 5
MIS3502 Application Integration and Evaluation Fall 2019 4.7 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.6 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS2402 Data-Centric Application Development Fall 2019 4.1 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.8 out of 5 MIS2402 Data-Centric Application Development Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 3.8 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5	MIS2502	Data Analytics	Spring 2020	4.4 out of 5
MIS3502 Application Integration and Evaluation Fall 2019 4.6 out of 5 MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS2402 Data-Centric Application Development Fall 2019 4.1 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.8 out of 5 MIS2402 Data-Centric Application Development Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 3.8 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5	MIS2502	Data Analytics	Spring 2020	4.0 out of 5
MIS3502 Application Integration and Evaluation Fall 2019 4.5 out of 5 MIS2402 Data-Centric Application Development Fall 2019 4.1 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.8 out of 5 MIS2402 Data-Centric Application Development Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 3.8 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5	MIS3502	Application Integration and Evaluation	Fall 2019	4.7 out of 5
MIS2402 Data-Centric Application Development Fall 2019 4.1 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.8 out of 5 MIS2402 Data-Centric Application Development Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 3.8 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5	MIS3502	Application Integration and Evaluation	Fall 2019	4.6 out of 5
MIS3502 Application Integration and Evaluation Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Spring 2019 4.8 out of 5 MIS2402 Data-Centric Application Development Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 3.8 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5	MIS3502	Application Integration and Evaluation	Fall 2019	4.5 out of 5
MIS3502 Application Integration and Evaluation Spring 2019 4.8 out of 5 MIS2402 Data-Centric Application Development Spring 2019 4.5 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 3.8 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5	MIS2402	Data-Centric Application Development	Fall 2019	4.1 out of 5
MIS2402Data-Centric Application DevelopmentSpring 20194.5 out of 5MIS3502Application Integration and EvaluationFall 20183.8 out of 5MIS3502Application Integration and EvaluationFall 20184.2 out of 5MIS3502Application Integration and EvaluationFall 20184.3 out of 5	MIS3502	Application Integration and Evaluation	Spring 2019	4.5 out of 5
MIS3502 Application Integration and Evaluation Fall 2018 3.8 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5	MIS3502	Application Integration and Evaluation	Spring 2019	4.8 out of 5
MIS3502 Application Integration and Evaluation Fall 2018 3.8 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5	MIS2402	Data-Centric Application Development	Spring 2019	4.5 out of 5
MIS3502 Application Integration and Evaluation Fall 2018 4.2 out of 5 MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5	MIS3502	• • • • • • • • • • • • • • • • • • • •		
MIS3502 Application Integration and Evaluation Fall 2018 4.3 out of 5	MIS3502	Application Integration and Evaluation	Fall 2018	
	MIS3502		Fall 2018	
T.I OUT OF THE TAIL OF THE TAIL OF THE TAIL TO THE TAIL OF THE TAI	MIS2402	Data-Centric Application Development	Fall 2018	4.1 out of 5
MIS2502 Data Analytics Summer I				
2018 4.6 out of 5		,		4.6 out of 5
MIS3502 Application Integration and Evaluation Spring 2018 4 out of 5	MIS3502	Application Integration and Evaluation		
MIS3502 Application Integration and Evaluation Spring 2018 4.3 out of 5				

Course	Course Title	Term	Rating
Number			
MIS3502	Application Integration and Evaluation	Spring 2018	4.3 out of 5
MIS3501	Data-Centric Application Development	Spring 2018	4.8 out of 5
MIS3502	Application Integration and Evaluation	Fall 2017	4.2 out of 5
MIS3501	Data-Centric Application Development	Fall 2017	3.7 out of 5
MIS3501	Data-Centric Application Development	Fall 2017	3.5 out of 5
MIS3501	Data-Centric Application Development	Fall 2017	4.7 out of 5
MIS3502	Application Integration and Evaluation	Spring 2017	4.3 out of 5
MIS3501	Data-Centric Application Development	Spring 2017	4.7 out of 5
MIS3501	Data-Centric Application Development	Spring 2017	4.8 out of 5
MIS3501	Data-Centric Application Development	Spring 2017	4.4 out of 5
MIS3502	Application Integration and Evaluation	Fall 2016	4.1 out of 5
MIS3501	Data-Centric Application Development	Fall 2016	3.5 out of 5
MIS3501	Data-Centric Application Development	Fall 2016	4.2 out of 5
MIS2502	Data Analytics	Fall 2016	4.1 out of 5
MIS2502	Data Analytics	Summer I 2016	4.4 out of 5
MIS3502	Application Integration and Evaluation	Spring 2016	4.8 out of 5
MIS3501	Data-Centric Application Development	Spring 2016	4.6 out of 5
MIS3501	Data-Centric Application Development	Spring 2016	4.2 out of 5
MIS3501	Data-Centric Application Development	Spring 2016	4.2 out of 5
MIS3502	Application Integration and Evaluation	Fall 2015	5 out of 5
MIS3501	Data-Centric Application Development	Fall 2015	4.3 out of 5
MIS3501	Data-Centric Application Development	Fall 2015	3.7 out of 5
MIS2502	Data Analytics	Fall 2015	4.1 out of 5
MIS2502	Data Analytics	Spring 2015	3.7 out of 5
MIS3501	Data-Centric Application Development	Spring 2015	3.5 out of 5
MIS3501	Data-Centric Application Development	Spring 2015	3.0 out of 5
MIS3580	Special Topics: Application Integration	Spring 2015	4.2 out of 5
MIS0855	Data Science	Summer I 2015	4.4 out of 5
MIS2502	Data Analytics	Summer I 2015	4.5 out of 5
MIS3501	Data-Centric Application Development	Fall 2014	3.9 out of 5
MIS3501	Data-Centric Application Development	Fall 2014	4.4 out of 5
MIS2502	Data Analytics	Fall 2014	4.1 out of 5
MIS2502	Data Analytics	Fall 2014	4.4 out of 5
MIS3501	Data-Centric Application Development	Spring 2014	3.5 out of 5
MIS3501	Data-Centric Application Development	Fall 2013	4.3 out of 5
MIS3501	Data-Centric Application Development	Spring 2013	4.4 out of 5

SERVICE CONTRIBUTIONS

Departmental Service Contributions

Webmaster for MIS Community WordPress site (May 2024 – present) Co-lead Departmental Workshop / Teaching the Students we have (August 2024)

 Workshop dedicated to developing instructional practices that promore curiosity, critical thinking, and perseverance in MIS students.

Created the MIS Helpdesk for Coding (September 2019 – Present)

- This service is designed to support MIS students who are new to coding.
- MIS students working at the Helpdesk strengthen their own skills as they instruct their peers. Working as a consultant is a signal of both interest and aptitude in coding.
- The MIS Helpdesk responds to roughly 50 inquires each semester and exists as a supplement to course specific resources.
- The MIS Helpdesk for Coding, by its very existence, conveys the department's commitment to students who need help, and the importance of coding itself.

Association for Information Systems SCLC National Conference (April 2019), Program Chair

- The AIS Student Chapter Leadership Conference (SCLC) had 181 non-Temple attendees from 33 schools across the country and Europe.
- Organized and facilitated Conference Competitions with National AIS representatives.
- Worked closely with AIS volunteers and committee members to manage events
- The conference celebrated the 10th anniversary of the AIS student chapters, which originated at Temple University.

Association for Information Systems SPO, MIS (July 2016 – June 2019), Advisor

I worked closely with student leadership of the AIS Student Professional Organization (SPO) to foster dramatic growth, innovation, and professional development. Some notable accomplishments follow.

- In the Fall of 2015, Temple's AIS student chapter had 68 members. By January of 2019 it boasted 124 members.
- Representation of Temple at the annual Student Chapter Leadership Conference.
 - 13 students traveled to compete in 2017.
 - Two student teams recognized with competition awards.
 - The Temple chapter recognized with two chapter awards.
 - 21 students traveled to compete in 2018.
 - Five student teams recognized with competition awards.
 - I received the Faculty Advisor of the Year award.
 - Temple hosted the SCLC in 2019.
 - Three student teams recognized with competition awards.
 - The Temple chapter recognized with two chapter awards.
- Technical Development workshops were revised to introduce experiential learning.
- Mentored and advised AIS student leaders.

- I continue to work closely with the AIS student leaders, especially the AIS Director for Information Technology.
- Served as co-advisor prior to 2016.

BBA/MIS Curriculum Redesign Vision Team (October 2018 – April 2019)

- Every course in the MIS curriculum was re-evaluated to prepare students for the emerging API economy and increase their technical currency in the workplace.
- Every course in the MIS Program was evaluated by a course-specific redesign committee. I served on two such committees, as well as the Vision Team. Each coursespecific committee submitted a proposed list of learning objectives and changes.
- The Vision Team reviewed, approved and/or recommended changes to all the proposals.

Chair of the MIS department's merit committee (September 2015 – September 2020, September 2022 – September 2024)

- Send reminders to all MIS faculty regarding merit related deadlines.
- Lead the merit committee through the department's documented merit criteria. I
 created the first consistently documented version of this criteria in 2015 and I continue
 to refine and maintain it at the direction of the merit committee and the department
 chair.
- Coordinate the review individual merit submissions by the departmental merit committee.
- Reconcile and compile the merit assessments and provide them to the department
- Propose and document changes for next year's criteria

MIS Awards and Scholarships Coordinator (September 2014 – April 2016)

The duties of the MIS Awards and Scholarships coordinator are to:

- Coordinate with the event planner for the annual IBIT Awards Ceremony ensuring that the awards and scholarships presented there are determined well in advance of the event.
- Coordinate with the individual program managers for existing categories of scholarships, ensuring that their nominations are determined in a timely manner.
- Call a meeting to review nominations and determine award recipients. The meeting should include the MIS department chair, the IBIT Awards Ceremony event planner, and persons representing faculty, student, alumni, and administration.
- Maintain documentation of related milestones / deadlines and how award and scholarship amounts have been distributed.

School Service Contribution

Member of the Masters' Programs Committee (April 2024 – Present)

Representative of the Fox School of Business in the Faculty Senate (July 2017 – July 2020, July 2023 - present)

Member of the Educational Programs and Policies Committee (December 2023 – Present)

Panelist - Perspectives from the 2008 Financial Crises, A CSPD Panel (4/27/2020)

Taught "Upward Bound" and B3USoar students in the Summer of 2021

• Adapted MIS0855 Data Science General Education course to be delivered as an online course to an audience of High School students.

Taught Pre-College Workshop (Introduction to Web Design) in the Summer of 2022

• Composed/developed all the course content.

Taught Pre-College Workshop (Introduction to Web Design) in the Summer of 2024

• Composed/developed all the course content.

Professional Service Contributions

NSF Cyber AI Workshop 2024: Contributor

In the Spring of 2024, I contributed content to the NSF Cyber AI Workshop held in Louisville Kentucky. The goal of the workshop was to collect and assess contributions from multiple educators from centers of academic excellence. Content contributions formed the basis for a new program of study which will contribute AI related material to the existing NICE Workforce Framework for Cybersecurity, and the Defense Cybersecurity Framework. This is a preliminary step towards the creation of a Center of Academic Excellence in AI by the NSF.

Institute for Business Information Technology: Digital Innovation Foundry projects

The Institute for Business Information Technology (IBIT) within the Fox School of Business exists to integrate industry perspectives with academic expertise. The institute nurtures relationships between Temple faculty, students, and industry leaders. At the invitation of Munir Mandviwalla, I have had a leadership role in the following Digital Innovation Foundry (DIF) projects.

- (Spring and Summer 2022) Faculty advisor for a team providing IoT research and recommendations to AmerisourceBergen Corporation. AmerisourceBergen (AB) is a leading distributor of pharmaceuticals AmerisourceBergen and is ranked #8 on the Fortune 500. In this project I collaborated with several students and Yan Wang from the College of Information Science.
 - Advised and directed student work.
 - Oversaw the selection of the IoT platform software.
 - Heavily influenced the architecture of the entire solution.
 - Procured physical devices (i.e. Bluetooth tags, and related hardware) and virtual resources. Virtual resources included the procurement of a Microsoft Azure Subscription dedicated to Fox Faculty for this and future efforts.
 - Deployed the IoT platform software as a Kubernetes service and provided documentation to AB.
 - o Students were then subsequently able to customize the platform as needed.

- (Spring 2020) Faculty advisor for a team developing Risk Analysis software for AmerisourceBergen. In this project I collaborated with two MIS undergraduates and Subodha Kumar from the Fox School of Business.
 - Guided students as the collected requirements from AB representatives.
 - o Researched the existing FAIR model for risk assessment.
 - Aided the student development of a Monte Carlo simulation of a FAIR model in Excel. Subsequently constructed a Web Service to do the same.
 - Oversaw student efforts to construct a prototype web application to leverage that service, including roles and domain specific FAIR questions.
- (Fall 2019) Faculty advisor for a team of Fox MBA students providing market analysis
 and recommendations to Synacor Inc. Synacor is an established technology and services
 firm that delivers managed portals, advertising, email and collaboration platforms, and
 cloud-based identity management to video, internet, and communications providers
 with annual revenues exceeding \$100 million.
 - Assisted the group in understanding the technical capabilities of Synacor's authentication service (CloudId) with its competitors (Ping, Okta, Keycloak, Adobe Primetime).

Software development for the Siminoff Research Group (2016-2019)

The Siminoff Research Group is an institute within the College of Public Health at Temple University. It is home to multiple federally funded research projects that examine how people communicate about health and healthcare and how this impacts their daily lives.

- Rewrote legacy Java application as web application. This application is to facilitate the in-depth semantic analysis of transcripts of patient / caregiver dialog.
 See: http://simcode.org
- Management / consulting for development of a mobile application used to support families and caregivers of children with Autism Spectrum Disorders.

Consulting for Temple Information Technology Department (2014)

 Documentation of systems and processes related to my prior role as Director of Solutions Development in Computer Services at Temple University.

Other Service Contributions

Non-credit teaching

- Introduction to Programming in PHP, Temple University Center City (2012)
- Introduction to Adobe Flash CS3 classes at Temple University Center City (2010)

Presentations

- "Automated Gmail Provisioning for Students Just in time for who?" Ellucian Live 2013
- Presented on IT Project Management at EDUCAUSE Annual Conference, 2008
- Poster-board session at the Annual Convention of the Middle States Association, 2008
- Presented poster-board session at the EDUCAUSE Mid-Atlantic Regional Conference,
 2005

Media Appearances/Interviews

- "Promoting an accessibility mindset in the classroom", Fox School News (https://www.fox.temple.edu/news) Jul 26, 2023
- "Temple's Digital Innovation Foundry is giving students real-world prototyping experience before they graduate", Technical.ly Philly (https://technical.ly/) Jul 6, 2023

NON-ACADEMIC (INDUSTRY) EXPERIENCE

Temple University (June 1998 – June 2014)

Director of Solutions Development

- Managed a team of 3 developers and one student intern.
- Provided leadership and managed the formation of the Academic Competency Center committee -- a collaborative forum for the Computer Services teams that facilitate instruction and learning.
- Initiated and implemented the STEM Server pilot program. The aim of this program was to provide centralized server resources to STEM students engaged in application development projects.
- Responsible for the development of a suite of web applications which provided IT
 Service Management functions (Service Requests, Service Catalog, Project Tracking,
 Change Management, Production Outage Reporting, and Time and Attendance Tracking)
- Implemented webex.temple.edu making web conferencing available to all university employees.
- Introduced Gmail / Google Apps to roughly 100,000 students, faculty, staff, alumni, and courtesy accounts. Coordinated all aspects of the migration and implementation. Developed and maintained a Google Apps implementation integrated with Temple systems.
- Oversaw and engaged in the development of both departmental web sites on www.temple.edu, including sites for the General Education Program, Student Affairs, Research Administration, Admissions, and others.
- Oversaw and engaged in the development of web-based applications, including the Online Application for Graduation, Commencement RSVP Automation, Annual Report for Faculty Activity, and others.
- Managed technical resources used in the implementation of BMC Remedy Incident Management.

Assistant Director of Integrated Systems and Emerging Technologies

- Managed a team of 2 developers, 2 support specialists, and multiple student workers with a focus on application development, project management, and communications technologies.
- Introduced Microsoft Exchange to our executive administrators at the university and coordinated all aspects of the implementation.
- Provided support and quality assurance for the Mirapoint SynQ product (an Outlook plug-in designed to synchronize calendar and address book data)
- Oversaw and engaged in the development of multiple web-based applications.

- Engaged in connectivity initiatives, streamlining the process which allows campus residents to connect to the Internet.
- Implemented Electronic Voting initiatives for both student and faculty elections.
- Coordinated and implemented multiple electronic Survey Projects.

Applications Manager for Decision Support Systems

- Developed web-based Adverse Events reporting system used by faculty conducting research.
- Incorporated electronic payment process into online application for admission.
- Developed application and related procedures to block the spread of the Blaster worm on the student network
- System migrations. Upgraded database server to SQL 2000. Migrated IIS 5.0 server hosting 30 plus web applications to new hardware.

Senior Programmer Analyst for Decision Support Systems

- Created and supported the online application for undergraduate admissions.
- Designed and implemented web-based request for dorm Ethernet service.
- Designed and implemented sign-in/sign-out time and attendance system.
- Developed / Implemented multiple Remedy applications and projects.
- Created TempStaff database (Temporary Employees of Temple University).

R&B Inc. (April 1997 – May 1998)

Business Systems Analyst

- Using Microsoft Access / Access Basic developed a database used to track the development of new products. Conducted related training.
- Using SQL Server, Microsoft Access, and Visual Basic developed a "Synchronization Manager" Program used to replicate data between a central server and a remote sales force.

Roberts Wesleyan College (October 1992 – April 1997) Assistant Director of Computer Services

- Installed and supported Novell Netware 2.15 through 3.12.
- Implemented and supported a comprehensive campus-wide database application. (ABT Campus).
- Supported a cluster of 7 servers in an NT / Netware hybrid environment.
- Developed applications using Basic, Dbase IV, Access and Visual Basic
- Installed / Supported Microsoft's SQL Server version 6.0.