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HELLO FROM THE COLLEG

SUMMER 2021

A MESSAGE FROM THE DEAN

The summer of 2021 was another summer that some of us spent working remotely, only this time renovations on East Hall were the cause for the faculty and staff to delay their return to campus until the Fall semester. I truly appreciate the flexibility, cooperation, and patience of everyone impacted. We are looking forward to the "new" offices and classrooms as well as the addition of a breakout room, student lounge area, and conference room.

Earlier this summer, I participated in some excellent discussion related to development of DSU's next strategic plan. We are all excited about what that means for our faculty, staff, and students. We are determined to meet DSU's promise to seek what's next. In the College of BIS, that means that we adapt and innovate, and give attention to what is relevant to equip our students for their future. Technology is infused in all of our programs while we also work to help our students develop the communication and interpersonal skills needed to contribute to their success in an ever-changing world. We are so appreciative of the professionals and industry leaders who serve as members of the advisory boards for our programs. Their willingness to share their time and expertise to provide feedback, input, and suggestions contributes to what we teach and how we do it. We are looking forward to meeting with each group during the Fall semester.

Traditionally, university faculty are contracted to fulfill three distinct areas of the job, which are: teaching, research and scholarship, and service. The faculty members in the College of BIS take those responsibilities very seriously and I am proud of their performance. In this newsletter, you will read about some activities and accomplishments that provide evidence of their good work. Please feel free to reach out if you have any questions or would like more information.

Take care,

Dr. Downe Bennett

Dr. Dorine Bennett



NEW FACULTY





Brooks New Assistant Professior

Dr. Patti Brooks has been hired as an assistant professor in the College of BIS. She has been an adjunct instructor and assistant professor at DSU in the past. Dr. Brooks will be teaching HIM and HIMS courses and she has also been appointed as the director for the Center for the Advancement of Health Information Technology (CAHIT) MadLab. Patti has spent the bulk of her professional career working in the healthcare industry, starting in health information management and then transitioning to the IT leadership team, as well as working in clinical intelligence and health care quality.



Eischen Hired as Instructor

Erich Eischen has been hired as an instructor in the College of BIS. Erich has degrees in the accounting and law fields, including Bachelor of Accounting, Masters of Professional Accounting, Juris Doctorate, and Master of Laws (Taxation). He comes to DSU with university teaching experience in South Dakota and international locations such as the United Arab Emirates (Dubai), the People's Republic of China (Dalian), and the Kingdom of Morrocco (Ifrane).

STUDENT NEWS





Phi Beta Lambda

DSU's business-related student organization, Phi Beta Lambda, has a long history of success and during the summer of 2021 that continued. Several members of DSU's PBL club competed at the 2021 PBL National Leadership Conference, held virtually June 24-27.

These competitions include objective tests, presentations, reports, and role-play scenarios. AJ Schoenfelder was named the Who's Who award recipient for SD, and congratulations to those who earned top 10 placings in several events:

- » AJ Schoenfelder: 7th place in contemporary sport issues, 8th place in project management.
- » Caleb Nielsen: 6th place in Informational management, 10th place in project management.
- » Nathan Roets: 4th place in Insurance concepts.
- » Taylor Myersr: 10th place in programming concepts.
- » Ryan Morganti: 5th in networking concepts.

At the Board of Regents meeting, held in Madison June 23 and 24, the Phi Beta Lambda Club (PBL) was honored with the Regental Award for Academic Excellence. PBL membership goals are to encourage career preparation, leadership development, and academic excellence in the business world. Club members engage in state and national events for both individual and team competitions, and they also participate in workshops hosted by business professionals and take part in subject-area panel presentations.

Scholar-Athletes

The North Star Athletic Association (NSAA) is pleased to announce its academic scholar-athletes for the 2020-21 academic season, with a total of 745 student-athletes receiving the academic achievement award. The 745 recipients, participating in NSAA fall, winter, and spring sports were recognized for their outstanding academic accomplishment in the classroom and on the playing field. To be eligible for the NSAA Academic Scholar-Athlete, a student-athlete must achieve a cumulative grade point average (GPA) of 3.25 on a 4.0 scale. Dakota State (S.D.) led the list with 130 scholar-athletes, including the following honorees with majors in the College of BIS:

Women's Cross Country

Jacia Christiansen

Volleyball

Lahna Matucha

Hannah Viet

Football

Carsten Bergersen

Riley Janke

Caleb Nielsen

Max Sonne

Marcus Vanden Bosch

Women's Basketball

Elizabeth Elder

Courtney Menning

Lexi Robson

Men's Basketball

Ryan Schuster

Andrew Tverberg

Men's Golf

Riley Janke

Marcus Vanden Bosch

Women's Golf

Lahna Matucha

Women's Track & Field

Jacia Christiansen

Lahna Matucha

Courtney Menning

Men's Track & Field

Jacob Joachim

Baseball

Jackson O'Neal

For more information and a complete list of recipients, visit <u>www.playnorthstar.com/article/6572</u>

CONGRATULATIONS TO ALL!

Real-life Experiences

Through the support of and collaboration with a variety of companies and organizations, the College of BIS is pleased to offer students opportunities to gain real-life experiences before their graduations. For example, Dr. Wendy Simmermon utilizes the help of professionals from education, healthcare, and financial fields to conduct realistic job interviews of the students as part of her Business Communication course. During the summer 2021 term, nine students participated by being interviewed. The internships and supervised professional practices (SPPs) give the students longer-term experiences on site at various locations, where they are able to apply the knowledge and practice the skills they've learned in their coursework. Julie Wulf Plimpton serves as the coordinator for our supervised professional practices, and during the summer 2021 term, nine students completed SPP experiences at clinics and hospitals in South Dakota, Iowa, and Nebraska. Dr. Deb Tech was the coordinator for 23 internships in business, computer information systems, or computer science that were completed during the summer 2021 term. One of these students, Caleb Nielsen, shared his internship story.

Student Entrepreneurial Plan

Kruttika Sutrave, an information systems doctoral student in the College of BIS, came up with a business plan using artificial intelligence to choose what to wear. Perfect Outfit will be a free, AI-enabled mobile app that recommends what clothes to wear. It also could include ideas for hair styles, accessories, and footwear. It will be designed for everyone, not just women, Sutrave said. Read more about it at SiouxFalls.Business





Hi, I'm Caleb Nielsen a Computer Information Systems major at DSU. As part of my curriculum, I was fortunate to intern in the business center of a healthcare organization, working with analysts and administrators/software engineers as part of a Human Resource Information Systems (HRIS) team. I worked within the administrator/ software engineering group, learning how to automate information systems. I also learned about enterprise software that manages financial and human capital and workflow. Even though my first projects weren't related to automation, the did acquaint

me with my team and the business side of the department. Due to the pandemic, some of our team members worked from home, some are back in the office, and others are doing a hybrid format. Besides helping organize the team's assets, my first project was a good opportunity for me to get to know everyone on the team, making it easier to approach and communicate with the HRIS team in various methods.

This communication culminated in a presentation I made for upper management regarding an automation project our team completed. I was tasked with finding out how much time could be saved over six months with our new approach. My original presentation contained the math behind the savings, but my supervisor informed me that upper management doesn't want all the numbers – just the final results. I learned that if upper management wants to know how you got your numbers, then they'll ask. Upper management has many things to do, so they want presentations to be short and to the point.

I also completed several projects independently, including a project that converted a manual process into an automated approach that informed employees of training events via personalized emails. All this is now done in under a minute, saving a significant amount of time for our Human Resources team.

On the more IT side of things, I learned how important it is to document your code and to document it well. During my internship, I went back and looked at some of my earlier code blocks and thought to myself, "What was I doing here again?" If I'm questioning how my code works, then others definitely will be wondering what's going on, so documenting what your code is doing, as well as your thought process throughout the program, is essential.

I'm glad I had the opportunity to intern at this organization. I learned the value of having a strong, cohesive team. Having a cohesive team made communicating, collaborating, and asking for assistance easy. The experience helped me grow as an IT and business professional.

DAKOTA STATE UNIVERSITY

FACULTY NEWS



Faculty Lead Professional Organizations

Faculty members, Renae Spohn and Patti Brooks, were elected to the board for SD Health Information Systems Society (SDHIMSS). They both attended the SDHIMSS Board of Directors Transition meeting on June 23.. Renae will be taking office as the Secretary and Patti will serve on the board for Programs and Membership.

On July 1st, Julie Wulf-Plimpton began a year-long term in 2021-2022 as president of the South Dakota Health Information Management Association (SDHIMA). This is part of a 3-year role of leadership for the professional organization, beginning with serving as president-elect in 2020-2021 and ending with a year of service as past-president in 2022-2023.

Dr. Omar El-Gayar was selected to serve as a commissioner with the ABET Computing Accreditation Commission (CAC). The commission is responsible for all accreditation decisions for computing programs as well as setting and revising accreditation criteria. He attended ABET's CAC Meeting this July. The meeting is a 4-day event for discussing and approving accreditation decisions as well latest proposed criteria revisions.

Assembly on Education Conference

Dr. Renae Spohn and Dr. Patti Brooks attended the Annual AHIMA AOE conference which was held virtually in July 2021. The Assembly on Education Symposium (AOE) is the American Health Information Management Association's annual symposium on education. The health information educator community comes together to learn, network, and uncover opportunities to impact healthcare.

Podcast

Dr. Jack Walters joined <u>DSU's Cyberology podcast</u> in July, where he spoke with the hosts as part of the series about artificial intelligence. He spoke about the societal and economic impacts of AI.

Presentations

EISTA

The paper, titled "Development of CNN Architectures Using Transfer Learning Methods for Medical Image Classification", authored by Ganga Basyal, Dr. David Zeng, and Bhaskar Rimal,

was presented at the 19th International Conference on Education and Information Systems, Technologies and Applications: EISTA 2021 in the in the context of the 15th International Multi-Conference on Society, Cybernetics and Informatics: IMSCI 2021, which was held virtually July 18 - 21, 2021.

AMCIS

There were a number of faculty and students involved in making presentations at AMCIS 2021: Digital Innovation and Entrepreneurship Virtual Conference held August 9-13. The annual Americas' Conference on Information Systems (AMCIS) is hosted by the Association for Information Systems. It is viewed as one of the premier information systems conferences.

Ambati, L., & El-Gayar, O. (2021). Design Principles for Multiple Sclerosis Mobile Self-Management Applications: A Patient-Centric Perspective. Proceedings of the Americas Conference for Computer Information Systems (AMCIS) 2021.

Chakrobartty, S., & El-Gayar, O. (2021). Explainable Artificial Intelligence in the Medical Domain: A Systematic Review. Proceedings of the Americas Conference for Computer Information Systems (AMCIS) 2021.

El-Gayar, O., Elnoshokaty, A. and Behrens, A. (2021). Understanding Design Features for Continued Use of Wearables Devices. Proceedings of the Americas Conference for Computer Information Systems (AMCIS) 2021.

Jernejcic, T., & El-Gayar, O. (2021). The Role of Privacy within the Realm of Healthcare Wearables' Acceptance and Use. Proceedings of the Americas Conference for Computer Information Systems (AMCIS) 2021.

Ofori, M., & El-Gayar, O. (2021). Empathizing with mHealth App Users in Application Design: Early-Stage Persona Development through Social Media Data Mining. Proceedings of the Americas Conference for Computer Information Systems (AMCIS) 2021.

Vyas, P., Liu, J. & El-Gayar, O. (2021). Fake News Detection on the Web: An LSTM-based Approach. Proceedings of the Americas Conference for Computer Information Systems (AMCIS) 2021. Best paper award for the entire conference (360 accepted papers).

Wahbeh, A., Al-Ramahi, M., El-Gayar, O., Nasralah, T., & Elnoshokaty, A. (2021). Mental Health and the COVID-19 Pandemic: Analysis of Twitter Discourse. Proceedings of the Americas Conference for Computer Information Systems (AMCIS) 2021.

Doctoral students and professors also collaborated on the Best AMCIS 2021 Complete Top 25% Papers honoree. This paper was titled "Comparative study of CNN models for brain tumor classification: Computational efficiency versus accuracy" and was co-authored by Ganga Basyal, Dr. David Zeng, Dr. Dave Bishop, and Bhaskar P. Rimal.

Dr. Cherie Noteboom, Dr. David Zeng, and doctoral students Rajesh Godasu and Sutrave Kruttika presented their paper titled "Applications of Deep Learning Augmented Systems for Covid-19 Predictions- A Literature Review".

WMSCI

Faculty and graduate students presented at the 25th World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI 2021). Ganga Prasad Basyal, David Zeng, and Bhaskar P. Rimal shared their paper, titled "Development of CNN Architectures Using Transfer Learning Methods for Medical Image Classification", at the Applications of Information and Communication Technologies in Education and Training session; and David Zeng, Cherie Noteboom, Kruttika Sutrave, and Rajesh Godasu shared their paper, titled "A Meta-Analysis of Evolution of Deep Learning Research in Medical Image Analysis", at the Information Systems, Technologies and Applications session. This conference, with presenters from a wide variety of countries, was held virtually.

Publications

One of the BIS Ph.D. IS graduate students, Melva Ratchford, along with faculty members Dr. Omar El-Gayar, Dr. Cherie Noteboom, and Dr. Yong Wang, published a journal article in *Information Security Journal: A Global Perspective*. The article was titled: <u>BYOD security issues: a systematic literature review, Information Security Journal: A Global Perspective</u>.

College of BIS faculty members, Dr. Insu Park and Dr. Jun Liu, along with one of our PhD Information Systems alumni, Vetrivadivel Vel, were co-authors of a paper published in the *Journal of Computer Information Systems* titled The Role of Enterprise Crowdsourcing Systems on Knowledge Application. Dr. Park was also co-author on another article in the Journal of Computer Information Systems titled Identity Sharing and Adaptive Personalization Influencing Online Repurchases.

Dr. Insu Park has been selected to serve as an associate editor for 2021's Information Systems Research, Special Issue: Unleashing the Power of Information Technology for Strategic Management of Disasters. He also serves on other editorial boards, including as an associate editor for Information Systems Frontiers and a reviewer for Journal of Management Information Systems (JMIS), International Journal of Electronic Commerce (IJEC), and Information Systems Journal (ISJ).

DSU's faculty members, Omar El-Gayar and Nevine Newar, along with IS doctoral student, Martinsol Ofori, published a paper titled "On the efficacy of behavior change techniques in mHealth for self-management of diabetes: A meta-analysis" in the Journal of Biomedical Informatics.



PROGRAM NEWS



Artificial Intelligence

We are excited to add the BS in Artificial Intelligence for Organizations to the College of BIS programs! After final approval from the South Dakota Board of Regents at their June meeting, we will be accepting students into the program beginning with the Fall 2021 semester. More information is available in the DSU Catalog or in the news at the DSU News site, the Madison Daily Leader, or Keloland News. The faculty of the College of BIS has collaborated with staff at DSU's Karl Mundt Library to establish a guide related to readings and resources about the impact of artificial intelligence across various discipline.

Ranked Top 15

Certificate in Information Technology is ranked in the Top 15 by <u>bestvalueschools.org</u>

DSU-SOAR

Dr. Dorine Bennett, Dean of the College of BIS, was appointed to the Board of Directors for DSU-SOAR. This is a new non-profit (5013C) organization that has been established for the purpose of strategic outreach that can be agile and responsive to external needs by developing, maintaining and operating economic

development initiatives that support the teaching, research, or service mission of Dakota State University. DSU-SOAR will expand opportunities for South Dakota faculty members, researchers, and students to participate in the application of research results and technological innovations in commerce, government, or public service.

CAHIIM Accreditation

Dakota State University is the 2nd university to achieve accreditation from the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM) at the associate, baccalaureate, and master's levels. The masters degree in Health Informatics and Information Management (MSHIIM) provides a better understanding of the healthcare world, as explained in an online article at siouxfalls.business. This program, which is open to students from a variety of fields, does include students working in healthcare, such as Snehal Shakar, who is one of the honorees for the American Society for Clinical Pathology (ASCP) 40 under Forty recognition.



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DAKOTA STATE UNIVERSITY



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