



College of Business and Information Systems

Summer
2018
Newsletter

PLACEMENT GOOD NEWS!

The 2017 Outcomes Report from the Career Services Office was completed this Summer showing placement and salary information from DSU graduates who responded to a recent survey. The average salary for College of BIS graduates exceeded the average salary for all DSU graduates at both the associate and bachelor's levels, with the highest average salary reported for the BS in Computer Information Systems major. The report also showed 100 percent placement of 100 percent of the BIS majors included.



The College of Business and Information Systems offers programs that have been accredited or approved by meeting national standards!



DSU
DAKOTA STATE

College of Business and Information Systems
820 North Washington Avenue - East Hall
Madison, SD 57042
Phone 605-256-5165
BIS@dsu.edu

CONGRATULATIONS TO STUDENTS

REGENTS AWARD

At the June 26-28, 2018 meeting of the SD Board of Regents (BOR), the Phi Beta Lambda (PBL) student organization received the SDBOR award for Academic Excellence. The mission of the PBL chapter is to bring business and education together in a positive working relationship through innovative leadership development programs. Proven results of FBLA-PBL membership are leadership, self-confidence, competitive abilities, enhanced resume, fundraising experience, good citizenship, and business proficiencies.

SCHOLARSHIP NOMINATION

Congratulations to DSU students, Derrick Burhardt and Ryan Marnette, on their nominations for the Irene Ryan Acting Scholarship for their work in DSU's Spring 2018 production of "The Elephant Man". Derrick is a professional accounting major in BIS. The students will represent DSU in competition at the American College Theatre Festival in January.

PBL CONFERENCE

Dakota State students attended the Phi Beta Lambda National Leadership Conference in Baltimore, MD along with their faculty advisors, Dr. Yenling Chang and Dr. Dan Talley. Each of the students earned Top 10 in the USA recognition in competitive events held at the conference. Students and their results are: Lindsey Vogl – 5th in Accounting for Professionals (upper division accounting knowledge), Jacia Christiansen – 8th in Accounting Principles (introductory accounting knowledge), and David Weidler – 10th in Personal Finance.



STUDENT EDUCATIONAL OPPORTUNITIES

IT ACADEMY

DSU hosted an Information Technology (IT) Academy which was funded by the National Science Foundation SD EPSCoR program. Participants in the Academy included 15 students from seven different South Dakota school districts. The students earned college credit by completing two courses, CIS 275 Web Application Programming I and CSC 150 Computer Science I, and internship experiences. Seven different agencies or institutions in Madison and the Lake County area provided the internships for the students.

SUPERVISED PROFESSIONAL PRACTICES

This summer there were 19 health information management students who completed 34 supervised professional practices (SPPs). A SPP is very similar to an unpaid internship, where the student visits a facility of his/her choice to work with HIM professionals. This allows the students to experience a week-in-the-life of a Health Information Management Department. These experiences may be completed at either a "traditional" or "nontraditional" site. Practicum experience in an acute care hospital is described as a "traditional" site, and other health care facilities are referred to as alternate or "non-traditional" sites. The students were primarily located in South Dakota with 27 students participating from the Black Hills to Sioux Falls and several places in between. Iowa, Illinois, Wyoming, Oregon, and Colorado also supported our HIM students for one or more supervised professional practices. DSU would like to give a big shout out to all the healthcare centers for supporting the HIM supervised professional practices as these are invaluable experiences for our students.

INFORMATION SESSIONS

CTE CONFERENCE

Dr. Dorine Bennett, Dean of the College of BIS, attended the Association for Career and Technical Education (ACTE) Conference in Rapid City, SD in July. She assisted staff from DSU's Admissions Office in sharing information about the variety of programs available in the College of BIS. She met with conference attendees to talk about the certificates, associate degrees, baccalaureate degrees, and masters degrees that are offered and explained how programs are designed to be "stackable" so that credits can be utilized by the students for academic progression.

SQL SATURDAY



In August, College of BIS faculty hosted an informational booth at the SQL Saturday event in Sioux Falls, SD. SQL Saturday is a free training event for Microsoft Data Platform professionals and those wanting to learn about SQL Server, Business Intelligence and Analytics. Attendees had the opportunity to visit with Drs. Omar El-Gayar, David Zeng, and Jun Liu to investigate our programs and have questions answered.

EAST HALL RENOVATION



Over the Summer months, East Hall on the DSU campus underwent a renovation to make more office space for the growing number of faculty members. East Hall houses the administrative office for the College of BIS and is the "home" to 25 faculty and staff for the College of BIS. In addition, there are offices for a number of faculty from the Beacom College of Computer and Cyber Sciences, an auditorium, and classroom spaces. As one of the first buildings at DSU, it has served many purposes since it was built in 1901.

NATIONALLY RANKED PROGRAMS

In August Dakota State University was notified that the health information technology associate degree program has been ranked as one of the 10 best value online associate's degree programs in health informatics and health information technology for 2018 by Online Associate's Degrees. The mission of Online Associate's Degrees is to provide expert guidance and real-world information about online associate's degrees in many different areas of study.

<https://www.onlineassociatesdegrees.net/nursing-healthcare/health-informatics/>

This recognition is one of several received this year for the College of BIS's health information and health informatics related undergraduate and graduate programs:

<https://www.healthcare-administration-degree.net/best/bachelors-health-information-management/>

<https://thebestschools.org/rankings/best-online-medical-billing-coding-programs/>

<https://www.gradschoolhub.com/affordable/online/doctorate/health-informatics/>

<https://www.mhaonline.com/blog/best-graduate-healthcare-degrees>

<https://www.valuecolleges.com/rankings/top-health-informatics-masters/>

RESEARCH HAPPENINGS

AMCIS 2018

The Americas Conference on Information Systems (AMCIS), an A+ information systems conference, was held on August 16-18, 2018 in New Orleans, LA, and a number of DSU faculty and students participated through Technology, Research, Education, and Opinion (TREO) presentations as well as full-paper and poster presentations.

TREO Talk: Information Technology

A Study of IT Security Policies – Hassan Alyami (DSU), James Boit (DSU), and Dr. Omar El Gayar (DSU)

TREO Healthcare

Geographic Variations and The Utilization of Health Care Resources – Tareq Nasralah (DSU), Abdullah Wahbeh (Slippery Rock University of Pennsylvania), Dr. Cherie Noteboom (DSU), and Dr. Yong Wang (DSU)

TREO Analytics

The Fit of Data Visualization Design for Knowledge Activation – Kari Sandouka (DSU), Dr. Cherie Noteboom (DSU), and Dr. Surendra Sarnikar (California State East Bay)

TREO Healthcare Technology Implementations

Comprehensive Framework for the Design of Diabetes Registries – Hassan Alyami (DSU) and Dr. Omar El Gayar (DSU)

NLP in Electronic Health Records: A Decade Perspective – James Boit (DSU), Hassan Alyami (DSU), and Dr. Omar El Gayar (DSU)

TREO Big Data

Theory of Dataphoric Space: A Dataphoric Systems Theory – Michael Pritchard (DSU) and Dr. Cherie Noteboom (DSU)

Impact of IT on Strategic Innovation and Competitive Advantage

How ECS Improve Creative Use of Employees' Knowledge? – Vetrivadivel Vel (DSU) and Dr. Insu Park (DSU)

Healthcare Analytics and Privacy Issues

IT for Diabetes Self-management - What are the Patients' Expectations? – Dr. Omar El Gayar (DSU), Tareq Nasralah (DSU), and Ahmed El Noshokaty (DSU)

XSEDE

In June, DSU entered an agreement with the EXtreme Science and Engineering Discovery Environment (XSEDE), an NSF-funded virtual organization that integrates and coordinates the sharing of advanced digital services – including supercomputers and high-end visualization and data analysis resources – with researchers nationally to support science. Under the Campus Champion Program, DSU will have easy access to NSF's high-performance computing and data resources as well as XSEDE support teams and training, education, and outreach to expand participation in research, education and scholarly endeavors. Dr. David Zeng has been designated as the Campus Champion and Adam Erck, who is enrolled in DSU's information systems doctoral program, volunteered to be a Student Champion.

AMCIS 2018



Martha McNeil shared her research poster.



Michael Pritchard and Kari Sandouka presented research papers related to their dissertations.



Kari Sandouka pictured with Albert Owasu. Albert served as a conference volunteer to meet part of his service requirements for his DScIS portfolio.

MWAIS 2018



Chad Fenner, Abdullahi Hassan, Dr. David Bixhop, Dr. Dennis Acuna (DSU alumni), James Boit, and Kanthi Nrakonda



Chad Fenner presenting a paper that he and Dr. Cherie Noteboom authored



James Boit presented a paper that he co-authored

MWACIS 2018

Several faculty and students participated in the Midwest United States Association for Information Systems (MWAIS) 2018 Conference held in St. Louis, MO on May 17 and 18. Dr. David Bishop was first author and presenter for a Research in Progress paper titled, “Toward Understanding Customer Preference Factors in Agile – A Research Plan” with Dr. Pam Rowland as the second author on the paper.

In addition, these papers were presented by DSU graduate students and alumni:

- Malaria Surveillance System Using Social Media — James Boit and Hassan Alyami
- How Wearable Technology Will Replace Verbal Authentication or Passwords for Universal Secure Authentication for Healthcare — Chad R. Fenner and Dr. Cherie Noteboom
- Negative Effects of Online Health Communities on User's Health: The Case of Online Health Forums — Tareq Nasralah, Ali Ahmed, Abdullah Wahbeh, Hassan Alyami, and Areeba Ali
- Manifest Observations on a Comprehensive Computer Security Policy — Dr. Dennis C. Acuña
- The Perceptions of Cyber Security in High School Girls, Kanthi Narukonda and Dr. Pam Rowland

FACULTY PUBLICATIONS

Dr. Cherie Noteboom and Dr. Pam Rowland wrote an article titled “An Investigation of Anchoring Female Millennials Students in an IT Career path: The CLASS Anchor Model” which was published in the July edition of the *Journal of the Midwest Association of Information Systems*. Their collaborative investigation of anchoring female millennial students in an IT career path was supported by a joint 2016 faculty research incentive (FRI) grant from DSU. The first results of their effort with this research endeavor were presented at the 50th Hawaiian International Conference on System Science (HICSS) Conference in 2017 and published in the conference proceedings.

Dr. Zixing Shen co-authored and published a research paper titled “A Case Study Using Hybrid Problem-Based Learning in Digital Imaging Process” on *IEEE Transactions on Education* in May 2018. *IEEE Transactions on Education* is the leading journal in the area of electrical engineering, computer engineering, and technology education.

Dr. Jun Liu published a paper titled “Using big data and network analysis to understand Wikipedia article quality” in the journal *Data & Knowledge Engineering*. This paper investigates if the social capital of contributors plays a role in determining the quality of the articles.

Dr. Jun Liu and Dr. Omar El-Gayar co-authored a paper titled “A comparative analysis of semi-supervised learning: The case of article selection for medical systematic reviews” published in the journal *Information Systems Frontiers*. This research shows that semi-supervised learning could significantly reduce the human effort and is a viable technique for automating medical systematic review creation with a small-sized training dataset.

Dr. Jun Liu and Dr. Ronghua Shan are coauthors of a paper titled “Classifying facts and opinions in Twitter messages: a deep learning-based approach” published in *Journal of Business Analytics*, Volume 1, 2018 - Issue 1. In this study, they proposed a deep learning-based algorithm that automatically separates facts from opinions in Twitter messages. The algorithm outperformed multiple popular baselines in an experiment they conducted. They further applied the proposed algorithm to track customer complaints and found that it indeed benefits subsequent analytics applications.

PROFESSIONAL ACTIVITIES

ACBSP



Dr. Deb Tech attended the Accreditation Council for Business Schools and Programs (ACBSP) Conference 2018 that was held June 8-11 2018 in Kansas City, MO. The theme of the conference was “Transforming Student Success through Recruitment, Retention, and Re-entry”. While there, she shared a poster presentation about supporting retention by building program communities using learning management systems (LMS). Dr. Dorine Bennett co-authored the poster which provided information about an online strategy that builds student connectedness.

In July, Dr. Tech began her leadership role as Chair of ACBSP Region 5. The 2018 Region 5 Fall Conference will be hosted by, and located at, Dakota State University in October.

SD CPA SOCIETY

Scott Morstad joined the Member Services Committee of the SD CPA Society. The committee is charged with reviewing and implementing programs and proposals to enhance member value and benefits.

AHIMA ASSEMBLY ON EDUCATION

The American Health Information Management Association’s Assembly on Education Symposium/Faculty Development Institute was held in Indianapolis, Indiana July 28th through August 1st, 2018. Renae Spohn and Julie-Wulf Plimpton attended the conference. Renae Spohn presented “Eating the Data Analytics Elephant One BYTE At a Time” on behalf of Julie Wulf-Plimpton, Linda Parks and Renae Spohn during the Faculty Development Institute. The presentation highlighted how an activity could be created in one class and advanced in higher level classes throughout the associate, bachelors, and master’s degree programs. She also presented “Gamification 101” describing how to create a course in D2L using simple gamification terms and techniques during the Assembly on Education Symposium portion of the conference. The conference is attended primarily by leaders of Health Information associate, bachelor’s and master’s degree educational programs throughout the United States.

ICIS

Dr. Zixing Shen was a member of the program committee for the International Conference on Information Systems (ICIS) 2018 Track on IT Use, Adoption and Implementation. ICIS is the premier conference in the IS field. In Summer 2018, she also served as Associate Editor (AE) for ICIS 2018.



@ DSUbiz



@ dsu_bis



DSU College of
Business and
Information
Systems



@ dsu_bis



DSUBIS