NKU Faculty Research, Scholarship and Creative Activity Highlights

URC's February Featured Presentation

The University Research Council presents our February featured presentation from Dr. Doug Krull (Psychological Sciences), presenting on his new research project on religiosity and gun control attitudes. Check out his presentation.

JANEL BLOCH
Professor, English

Award for Outstanding Article in Business & Professional Communication Quarterly Received by Janel Bloch & Jeremy Rosselot-Merritt

Janel Bloch (faculty, Dept. of English) and co-author Jeremy Rosselot-Merritt (PhD candidate in the Department of Writing Studies at the University of Minnesota-Twin Cities and Janel's former graduate student in the Master of Technical and Scientific Communication program Miami University) received the outstanding article in Business & Professional Communication Quarterly (BPCQ) award (https://www.businesscommunication.org/page/bcq-award) from the Association for Business Communication (ABC) for their article "Mentoring in Business and Professional Communication: Case Study of a Multi-Year Dynamic" This article discusses mentoring of graduate students and early career researchers in business and professional communication (BPC). Using a critical reflective approach, they analyze artifacts from their own mentoring dynamic over time to help characterize potential formal and informal mentoring practices in BPC. This award was announced at the ABC's October 2020 virtual Annual International Conference, which had approx. 400 attendees. The ABC has approx. 1,300 members, and BPCQ (https://journals.sagepub.com/home/bcq) is a peer-reviewed journal published by Sage.

NORTHERN KENTUCKY UNIVERSITY

ALINA CAMPAN, TRAIAN MARIUS TRUTA and ALYSSA APPELMAN
Professors, Computer Science and Associate Professor, Communication
12/10/2020
[COI faculty present research on Collecting Domain-Relevant Tweets: Creation and Application of a New Framework](#)
Social networks are used extensively nowadays to connect with friends and family and to communicate information and opinions. Twitter is one of the most influential platforms for sharing ideas and opinions. Unfortunately, the information circulating in the Twitter universe is not always valid and truthful. Some people are using this platform to spread misleading or fake information, especially around hotly debated topics such as elections, climate change, and vaccines. For social science researchers, collecting tweets on a specific topic for further analysis is an important task and, surprisingly, there is little research or consensus on a methodology to conduct collection so as to obtain a relevant and maximal tweet sample set. In this paper, we present an approach to identify a "good" set of keywords to query Twitter by for a given topic (our case study topic is vaccination); the determined keyword set can then be used by researchers to collect a reliable set of domain-relevant tweets via Twitter Free Streaming API with filtering.

* Alina Campan, Traian Marius Truta, Shawn Huesman, Celine Wardrop, Alyssa Appelman, "Collecting Domain-Relevant Tweets: Creation and Application of a New Framework," International Workshop on Deviant Activities on Social Media (DEVIANCE) In Conjunction with IEEE International Big Data Conference, Virtual Conference, 2020.

DAVID CHILDS
Associate Professor, Teacher Education
9/16/2020
[Dr. Childs Publishes Book Chapter on the Theological Justifications of Slavery and the Civil War](#)
The American Civil War is one of the most researched historical events in U.S. history. Many books, articles, lectures and films have been created surrounding the subject matter. The factors that led to the bloodiest conflict in U.S. history are varied and consist of a confluence of cultural, societal, economic, political and theological forces (McPherson, 2003; Stamp, 1991). But the primary issue that triggered a war between the states was slavery. After a long, hard battle the Union forces ultimately became the victor in the Civil War making further arguments to justify slavery pointless, as the peculiar institution had now been abolished. What were some of the ideological undertones that caused the south to embrace slavery and ultimately the Civil War? How was slavery, the Civil War and its results viewed by the 19th century religious community in the United States? Although there were compelling theologically based arguments offered for and against slavery, in this essay I argue that the South's insistence on defending slavery and racism at all costs, tainted their scriptural analysis. This ultimately lead them to secede, thus leading to a Civil War. This chapter builds on Mark Noll's (2006) idea that the Civil War posed a "theological crisis" to religious America involving the Bible and slavery. Based on Noll's work, the essay will examine various scriptural arguments for and against slavery and the Civil War.

* Childs, D. (2020). Slavery was god's will: How abolitionists challenged social and theological justifications for the civil war In M. Karpyn (Ed.), Teaching the Causes of the American Civil War (1850-1861). NY, New York: Peter Lang.

HAOQIANG JIANG

Assistant Professor, Business Informatics
11/26/2020
Data Science Skills and Graduate Certificates: A Quantitative Text Analysis

The tremendous amount of data collected from connected devices and social media has created a high demand for new skills to help organizations gain the power of big data. With a shorter completion time, graduate certificates appeared to be a desirable alternative for working professionals to develop these skills. However, it was unclear if certificates met the job market's needs. Quantitative text analysis was used to analyze data science skills in job descriptions and skills taught in graduate certificates. The results showed that 21% of skills were common across seven job categories. 'Team' was a non-technical skill in high-demand, while 'Python' and 'SQL' were the technical skills in high demand. Although business programs offered the highest number of certificates, a lower number of data-science skills were taught in these certificates. The findings also suggested that job categories in the EDISON Data Science Professional Profiles could be grouped into two separate profile groups.

* Jiang, H., & Chen, C. (2020). Data Science Skills and Graduate Certificates: A Quantitative Text Analysis. Accepted for publication Journal of Computer Information Systems. Manuscript DOI: 10.1080/08874417.2020.1852628

HAOQIANG JIANG

6/20/2020
Dr. Jiang publishes Designing for the Co-Use of Consumer Health Technology in Self-Management of Adolescent Overweight and Obesity: Mixed Methods Qualitative Study

This study aimed to explore design requirements and enabling factors for the use of consumer health technology (CHT) as a social support tool for patients (as primary users) and parents and health care providers (as co-users). Our model incorporates key components of the unified theory of acceptance and use of technology (UTAUT) within the framework of the obesity care model (OCM) by recognizing patient self-management as the central process with the influence of their care support network on CHT use and outcomes. Our study integrates and extends the perspectives of 2 seminal models to explore design features and social influence roles for the successful user-centered design of CHT for weight self-management in adolescents. Although the co-users (ie, adolescents, parents, health care providers) suggested differing features consistent with their roles, role definitions were congruent. All users recognized the adolescent as the primary user with differential, supportive use from parents and health care providers. This multistakeholder approach can guide successful CHT design that reinforces the collective perspective of self-management.

* LeRouge, C. M., Hah, H., Deckard, G. J., & Jiang, H. (2020). Designing for the Co-Use of Consumer Health Technology in Self-Management of Adolescent Overweight and Obesity: Mixed Methods Qualitative Study. JMIR mHealth and uHealth, 8(6), e18391.

SUK-HEE KIM

Associate Professor, School of Social Work
4/14/2020
[Dr. Suk-hee Kim and her community partners presented to the 2020 National Rx Drug Abuse and Heroin Summit: Comprehensive Opioid Abuse Site-Based Prevention, Education, and Pre-Arrest Diversion Model and Implementation](#)
The purpose of the Northern Kentucky County Detention Center's overdose prevention, education, and pre-arrest diversion program is to examine the impact of overdose prevention and pre-arrest diversion programs. The program also incentivizes overdose prevention and supports new and existing overdose prevention and pre-arrest diversion programs in the region. This program allows first responders and appropriate officials to purposefully to create new programs and support, such as Quick Response Teams to respond in the aftermath of an overdose. It provides an opportunity to reduce the number of people who are dying as a direct result of opioid overdoses in the Northern Kentucky regions. It addresses the gap between when an overdose occurs and when someone can get into treatment. This program has three goals: (1) supporting naloxone distribution programs in the region, (2) collaborating with local police departments, healthcare, and rehabilitation providers, and (3) partnering with university as an action research partner.

* Kim, S., Merrick, J., & DeFalco, A. (2020). Comprehensive Opioid Abuse Site-Based Prevention, Education, and Pre-Arrest Diversion Model and Implementation. National Rx Drug Abuse & Heroin Summit 2020.

SUK-HEE KIM

4/16/2020
[Dr. Kim presented to the 2020 National Rx Drug Abuse and Heroin Summit: Specialized Case Management and 24/7 Helpline Program: Development Challenges and Collaborative Strategies](#)
Northern Kentucky's Specialized Case Management and 24/7 Helpline program is a multi-county, multi-system regional initiative to deflect individuals with substance use disorder (SUD) away from the criminal justice system and expedite their placement into treatment and other community-based support services. It provides centralized treatment navigation to pre-arrest diversion and quick response teams, as well to community members. This initiative has five goals: (1) partnering with law enforcement and first responders, (2) decreasing incarceration, recidivism, and overdose rates, (3) increasing pathways to treatment, (4) improving links to behavioral health interventions, healthcare, and support resources, and (5) collecting and analyzing data for evidence-based decision-making. This session highlighted and discussed this program's development, strategies, and challenges. Participants learned strategies to effectively and safely implement sister programs in their own communities.

* Kim, S. & Peters, A. (2020). Specialized Case Management and 24/7 Helpline Program: Development Challenges and Collaborative Strategies. National Rx Drug Abuse & Heroin Summit, 2020.

SUK-HEE KIM

11/6/2020

[Dr. Suk-hee Kim presented at the 106th Kentucky Academy of Science Virtual Annual Meeting: Assessing Student Readiness in Working with Older Adults](#)

Students from a variety of backgrounds often display an explicit lack of interest in working with the aging population. Given that older adults are the fastest growing segment of the population, both in the United States and around the world, students, regardless of their discipline or field, will come into contact with the aging population and their families. The purpose of the presentation were to (1) assess knowledge of and attitudes towards aging in a sample of undergraduate and graduate students undertaking , BSW and MSW degrees in social work, (2) analyze the extent to which knowledge, attitudes, perceptions of gerontological social work, and other factors are associated with interest of aging-related issues in working with aging populations, and (3) provide the social work students with new educational materials to enhance their knowledge base regarding relevant gerontological issues.

* Kim, S. (2020). Assessing Student Readiness in Working with Older Adults. 106th Kentucky Academy of Science Virtual Annual Meeting, November 6, 2020.

SUK-HEE KIM

11/18/2020

[Dr. Suk-hee Kim presented at the Council on Social Work Education 66th Annual Program Meeting 2020: Cognitive Competence and Healthy Brain](#)

Dr. Suk-hee Kim presented her peer-reviewed research study "Cognitive Competence and Healthy Brain" during the Behavioral and Cognitive Health session for the Council on Social Work Education (CSWE) 66th Annual Program Meeting 2020-Leading Critical Conversations: Diversity, Equity, & Inclusion, November 16-20, 2020. Cognitive impairment has profound financial implications for our economy and health care system. The findings suggest that assessing healthy cognitive aging within social work, gerontology and any other related field in health are most needed to capture and further assess the effectiveness of many preventions and interventions for healthy brain aging. Future studies could examine not only the music and social engagement interventions but also take into account cultural characteristic for race and ethnic group. Assessing cognitive impairment is essential for social workers in both research and practice including clinical contexts.

* Kim, S. (2020). Cognitive Competence and Healthy Brain. 66th Annual Conference of the Council of Social Work Education (CSWE), VA, November 18, 2020.

SUK-HEE KIM

11/19/2020

Dr. Suk-hee Kim and her research collaborator presented at the Society for Social Work and Research (SSWR) 2020. Healthy Brain Initiative for Older Adults (HBIOA): Music Training and Social Engagement

The number of older adults and consequently the number of older adults living with cognitive impairment is increasing rapidly. No pharmacological interventions have been successful at mitigating the effects or curing Alzheimer's disease and related dementias. Social stimulation and participation in cognitively stimulating and challenging activities are two modifiable lifestyle factors shown to effect cognitive ability during aging. Social interaction and music training have been shown to reduce dementia incidence. These specific interventions were used due to evidence showing the risk of loneliness and social isolation to our health are similar and, in some cases, more detrimental than smoking and being obese. Music training and social engagement were used as they are effect ways to challenge the brain due as music lesson utilizing cognitive, motor and multiple sensory systems simultaneously in particular.

* Kim, S. & Schneider, C. (2019). Healthy Brain Initiative for Older Adults (HBIOA): Music Training and Social Engagement. 24th Society for Social Work and Research, VA, January 19, 2020.

SUK-HEE KIM and JULIE OLBERDING

Associate Professor, School of Social Work - Associate Professor, Political Science/Criminal Justice/Organizational Leadership
1/29/2021

Dr. Suk-hee Kim and Dr. Julie Olberding's manuscript has been accepted to the Journal of Social Work Education.
Experiential philanthropy, or student philanthropy, is a type of service learning that helps students actively learn about community needs and nonprofit organizations. This "learning by giving" approach has the potential to enhance various social work competencies identified by social work scholars and associations, such as the Council on Social Work Education. This article examines the outcomes of this approach for social work students, using a multifaceted conceptual framework that recognizes students as active learners, community members, and social activists. The results indicate that experiential philanthropy had positive outcomes on various measures for the vast majority of respondents (generally 90% or more). Many effects were significantly greater for undergraduate students than graduate students, based on statistical analyses.

* Olberding, J. C. & Kim, S. (2021, Accepted). Experiential philanthropy in social work education: Assessing outcomes for students as active learners, community members, and social activists. Journal of Social Work Education.

NKU Faculty Research, Scholarship and Creative Activity Highlights

JENNIFER KINSLEY

Professor, Chase College of Law
12/1/2020
[Prof. Kinsley publishes article on legal regulation of BLM protests](link)
Cities' responses to the 2020 BLM protests highlight the significant failure of First Amendment law to fully address the constitutionality of race-based speech regulations. In response to BLM, government often restricts protests based on its assertion that curtailing speech is necessary to apprehending crime. It asserts a significant interest in preventing violence and argues that it cannot identify or apprehend perpetrators when peaceful protestors are in the way. This argument in essence places speech and safety in direct opposition and relegates speech to a lesser role than the preservation of public order. This conclusion turns the First Amendment on its head. The Constitution affords speech greater protection in its hierarchy of values than it credits the need to solve crime, and municipalities harm the normative significance of the First Amendment when they view it as a distraction to police functions. What is worse, governmental attempts to suppress speech associated with BLM illustrate a further First Amendment problem: free speech jurisprudence fails to account for speech regulations that are facially content-neutral, but content-motivated by racial animus. Under the Fourteenth Amendment, governmental actions arising from invidious racial intent and impose racially disparate outcomes are unconstitutional. But per the First Amendment, the government's intent is not relevant so long as the speech restriction is content-neutral. Courts should resolve this tension.

* 59 U. Louisville L. Rev. 1 (2020)

RYAN SALZMAN

Associate Professor, Political Science, Criminal Justice and Organizational Leadership
1/1/2021
[Dr. Salzman publishes book on a new form of political behavior: placemaking.](link)
How people associate and engage in politics in the 21st century is notably different from similar behaviors in the 20th century. Ryan Salzman examines the political potential of placemaking, an increasingly popular set of behaviors that were unfamiliar to the American public until the last two decades. Placemaking exemplifies a shift that is occurring in the way Americans participate in their political system, and it appears that that participation is increasingly effective in the context of American democracy. Informed by interviews, surveys, and material review, Salzman compares the process of placemaking to traditional political and associational behaviors, providing evidence that placemaking has tremendous political potential. Placemaking is an innovative set of behaviors, largely understood to influence economic and community development. From painting crosswalks to community gardens, Americans are engaging in their communities with real political and civic consequences. This text expands our understanding of placemaking, updating the way we think about civic and political engagement in the 21st century.

* Salzman, Ryan. 2021. Pop-Up Civics in 21st Century America: Understanding the Political Potential of Placemaking. Routledge: New York.

JEFF VARRONE

Assistant Director- Center for Innovation and Entrepreneurship- Lecturer, Management
1/6/2021
Entrepreneurship Faculty Members (Mornah, Strobl, Varrone) present at USASBE Conference
Entrepreneurial Competencies are an important metric of entrepreneurship success and activity. Finding ways to offer entrepreneurship programs for the high school level that introduces and offers entrepreneurial competencies in an applied learning environment is a critical step in the entrepreneurship pipeline. The Governor's School for Entrepreneurs (GSE) in the state of Kentucky is a three-week intensive program that opens entrepreneurship excitement and experiences for high school students. This research seeks to evaluate the efficacy of the GSE in developing entrepreneurial competencies among high school students. The purpose of this research is to better understand the impact of competency-based entrepreneurship education on entrepreneurial intentions. The evaluation supports an understanding of the importance of how entrepreneurship is taught and which teaching activities better effect certain desired competencies.

* Varrone, J., Mornah, D., & Strobl, Z. (2021). Evaluating Entrepreneurial Competencies in a High School Immersive Program- Dissecting the High-Schooler's Entrepreneurial Competencies. United States Association for Small Business and Entrepreneurship (USASBE) Conference 2021, Virtual

MAHDI YAZDANPOUR

Assistant Professor - Physics, Geology & Engineering Technology
11/26/2020
Dr. Yazdanpour's research is published in IEEE Transactions on Visualization and Computer Graphics Journal (Top 20 in "Computer Vision and Pattern Recognition" and "Signal Processing" Journals)
We present a new framework for online dense 3D reconstruction of indoor scenes by using only depth sequences. This research is particularly useful in cases with a poor light condition or in a nearly featureless indoor environment. The lack of Red Green Blue information makes long-range camera pose estimation difficult in a large indoor environment. The key idea of our research is to take advantage of the geometric prior of Manhattan scenes in each stage of the reconstruction pipeline with the specific aim to reduce the cumulative registration error and overall odometry drift in a long sequence. This idea is further boosted by local Manhattan frame growing and the local-to-global strategy that leads to implicit loop closure handling for a large indoor scene. Our proposed pipeline, namely ManhattanFusion, starts with planar alignment and local pose optimization where the Manhattan constraints are imposed to create detailed local segments. These segments preserve intrinsic scene geometry by minimizing the odometry drift even under complex and long trajectories. The final model is generated by integrating all local segments into a global volumetric representation under the constraint of Manhattan frame-based registration across segments. Our algorithm outperforms others that use depth data only in terms of both the mean distance error and the absolute trajectory error, and it is also very competitive compared with RGB-D based reconstruction algorithms.

* M. Yazdanpour, G. Fan, and W. Sheng. "ManhattanFusion: Online Dense Reconstruction of Indoor Scenes from Depth Sequences," In IEEE Transactions on Visualization and Computer Graphics (TVCG), November 2020.

RESEARCH NEWS

SUK-HEE KIM
Associate Professor, School of Social Work

Dr. Suk-hee Kim receives the Council on Social Work Education's Diversity, Social, and Economic Justice Community Partnership Action Inaugural National Award 2019

The Council on Social Work Education's Diversity, Social, and Economic Justice Community Partnership Action Inaugural Award is to honor the significant contributions of social work in advancing community partnership action. Community partnership actions are central to the advancement of social and economic justice, which is intrinsic to social work education. Historically, dating back to the settlement houses, our profession is rooted in working with the community to solve social problems and issues. Community partnerships enhance social justice work by promoting meaningful reciprocal collaboration. These activities also develop connections between theory and practice in real-life contexts toward promoting social, economic, and environmental justice competencies.

Dr. Suk-hee Kim receives the Council on the Social Work Education's Role and Status of Women in Social Work Education (CORSW) Community Impact Award 2020, a national recognition that celebrates feminist leadership models in social work education.

Dr. Suk-hee Kim receives the prestigious national award for her Rising Hope for Aging Project, a community-based learning initiative that connects NKU students with residents at The Golden Tower, a low-income housing unit located in Covington, Kentucky, for senior citizens. Dr. Kim proposed a collaboration with NKU's social work program. The proposed collaboration involved establishing a curriculum and experiential learning program for Dr. Kim's students and community senior residents at Golden Tower. Dr. Kim and her students provide social stimulation that the residents so desperately need and conduct critical assessments and mental health screenings to determine the interventions necessary for residents to successfully age in place.

Do you have research, scholarship or creative activity to share?
Use this link to submit for the next edition:
https://nku.co1.qualtrics.com/jfe/form/SV_b4qA1B6xPEqA50h
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Office of the Vice Provost for Graduate Education, Research and Outreach

NKU NORTHERN KENTUCKY UNIVERSITY