

# Proceedings of the 2019 Informing Science + IT Education Conferences (I<sup>n</sup>SITE)

## Table of Contents

### ***Topic: Cyber Security***

The Effect of Rational Based Beliefs and Awareness on Employee Compliance with Information Security Procedures: Case Study of a Financial Firm [Abstract] <b>Golan Carmi, Dan Bouhnik</b> .....	1-2
Cybersecurity, IT-aided Education, and TeLEs: Nexus, Vistas & Realities <b>Emmanuel C. Ogu, Chiemela Ogu</b> .....	3-19

### ***Topic: "Fake News": Bias, Misinformation, Disinformation, Propaganda, and Fictitious Reporting of News***

Addressing the Challenge of Guiding Our Students on how to Deal with Fake News <b>Val Hooper</b> .....	21-32
Fake News and Informing Science [Abstract] <b>T. Grandon Gill</b> .....	33-34
The KGB's Operation SIG: A 50-Year Campaign to Incite Hatred of Israel and Jews [Research in Progress] <b>Eli Cohen, Elizabeth Boyd</b> .....	35-70
Ensemble Learning Approach for Clickbait Detection Using Article Headline Features <b>Dilip Singh Sisodia</b> .....	71
Does G-d Lie? Understanding Dissembling in the Bible <b>Arthur J. Grant, Eli B Cohen</b> .....	73-79
Ethos, Pathos and Logos: Rhetorical Fixes for an Old Problem: Fake News <b>A. J. Grant</b> .....	81-91

### ***Topic: Mentoring and Teaching Doctoral Students***

Perspectives on Historically Marginalized Doctoral Students in the United States and South Africa <b>Pamela Felder</b> .....	93
A Project Management Perspective of PhD Supervision Process – Towards Effective and Efficient Model [Abstract] <b>Gali Naveh, Dorit Tubin</b> .....	95-97
Evaluation of a Transdisciplinary Cancer Research Training Program for Under-Represented Minority Students <b>Michael T. Halpern, SJ Dodd, Carolyn Y. Fang, Yin Tan, Lin Zhu, Olorunseun O. Ogunwobi, Grace X. Ma</b> .....	99-108

## ***Topic: Case Method of Teaching***

Fostering Self and Peer Learning Inside and Outside the Classroom through the Flipped Classroom Approach for Postgraduate Students <b>Eugenia M. W. Ng</b> .....	109
Did You Also Fall Asleep During a Principles of Programming Languages Lecture? How Did a Re-design of a PPL Course Succeed to Keep the Students Tuned-in? [Discussion paper] <b>Moshe Goldstein, Ariel Stulman</b> .....	111-117

## ***Topic: Teach IT: Teaching and Learning of IT***

How to Program a Chatbot – An Introductory Project and Student Perceptions <b>Ju Long, Juntao Yuan, Hsun-Ming Lee</b> .....	119
Combining Summative and Formative Evaluation Using Automated Assessment <b>John English, Tammy English</b> .....	121
Assessing the Graphic Questionnaire Used in Digital Literacy Training <b>Elena Maceviciute, Thomas D. Wilson, Zinaida Manžuch</b> .....	123
MaDaScA: Instruction of Data Science to Managers <b>Sahar Golan, Dan Bouhnik</b> .....	125-140
Virtually There: The Potential, Process and Problems of Using 360° Video in the Classroom <b>Sophie McKenzie, Justin Rough, Aaron Spence, Nick Patterson</b> .....	141
Concept-based Analysis of Java Programming Errors among Low, Average and High Achieving Novice Programmers <b>Philip Olu Jegede, Emmanuel A. Olajubu, Adekunle Olugbenga Ejidokun, Isaac Oluwafemi Elesemoyo</b> .....	143

## ***Topic: Student Research: Masters & Doctoral Program Research in Progress***

The Potential Impact of the “No Fear Act” on Equity and Diversity among Federal CFO Act Agencies: What is the Trend of Occupational Segregation [Research-in-Progress] <b>Daniel Acheampong</b> .....	145-148
Corporate Sustainability: The Impact of Corporate Leadership Gender on Year Over Year Performance <b>Jennoa R. Graham</b> .....	149-183
An Overview of the Global Open Educational Badge Movement: Opportunities and Challenges [Abstract] <b>Terry M. McGovern</b> .....	185-186
Introducing Computational Thinking Practices in Learning Science of Elementary Schools [Research-in-Progress] <b>Gilad Shamir, Dina Tsybulsky, Ilya Levin</b> .....	187-205
The Growing Need for Cyberbiosecurity <b>Glenda Turner</b> .....	207-215
Promoting Healthy Nutrition through Educational Escape Games <b>Tal Yachin, Miri Barak</b> .....	217-226

## **Topic: Student Paper: Completed Research**

Influence Factors on the Adoption of a Financial Application [Abstract] <b>Golan Carmi, Nethanel Drezner</b> .....	227-229
Automatic Detection and Classification of Dental Restorations in Panoramic Radiographs <b>Talia Yeshua, Ya'akov Mandelbaum, Ragda Abdalla-Aslan, Chen Nadler, Laureen Cohen, Levana Zemour, Daniel Kabla, Ori Gleisner, Isaac Leichter</b> .....	231
An Informative Machine-Learning Tool for Diagnosis of Osteoporosis using Routine Femoral Neck Radiographs <b>Talia Yeshua, Sarah Rebibo, Keren Jacobson, Ori Safran, Meir Liebergall, Isaac Leichter</b> .....	233-237

## **Topic: Transdisciplinarity and Knowledge Transfer across Sectors**

Views and Tendencies of introducing Computational Thinking in Australian Schools [Research in Progress] <b>Dorian Stoilescu</b> .....	239-245
Challenges in Designing Curriculum for Trans-Disciplinary Education: On Cases of Designing Concentration on Informing Science and Master Program on Data Science <b>Dimitar Grozdanov Christozov, Katia Rasheva-Yordanova, Stefka Toleva-Stoimenova</b> .....	247
Classroom Implementation of Instructional Strategies and Techniques that are Based on Universal Instructional Design Principles and Support Diversity <b>Mark Overgaard, Peter Fenrich</b> .....	249-256
User-Generated Geospatial Meteorology Map Prototype <b>William Miranda-Hill, Jozef Goetz</b> .....	257-269

## **No Specified Topic**

Learning Entrepreneurship through Virtual Multicultural Teamwork <b>Anat Goldstein, Ruti Gafni</b> .....	271
Prosumers' Engagement in Business Process Innovation – The Case of Poland and the UK <b>Ewa Wanda Ziemba, Monika Eisenhardt, Roisin Mullins, Sandra Dettmer</b> .....	273
Retaining and Advancing Underrepresented Women in Technology: Insights from ITSMF EMERGE Survey <b>Alisha D. Malloy, Yolanda Smith</b> .....	275-293
Understanding Online Learning Based on Different Age Categories <b>Danielle Morin, Hamed Safae Fard, Raafat George Saadé</b> .....	295
Review of Blockchain Literature – Its Application and Acceptance <b>Raafat George Saadé, Joe Aboujoude, Mahesh Chandra Sharma</b> .....	297-306
Explaining Performance Using a Multi-Media Tool <b>Raafat Saadé, Fassil Nebebe, Dennis Kira</b> .....	307-319
Do Students Really Want to Know? Investigating the Relationship between Learning Analytics Dashboards and Student Motivation <b>Danny Toohey, Tanya McGill, Chad Berkelaar, Ananth Kadekodi, Dominika Kaminska, Melisa Lianto, Nathan Power</b> .....	321-332

Agile Requirements Engineering: An Empirical Analysis and Evidence from a Tertiary Education Context	
<b>Meetu Thomas, Mali Senapathi</b> .....	<b>333</b>
A Broader Look at a Student Newspaper under Disruptive Changes	
<b>Minh Huynh, Nicholas Walsh, Scott McDonald</b> .....	<b>335-350</b>
Implications of Updating Digital Literacy – A Case Study in an Optometric Curriculum	
<b>Jo Coldwell-Neilson, James A Armitage, Ryan J Wood-Bradley, Blair Kelly, Alex Gentle</b> .....	<b>351</b>
Updating PowerPoint for the new Business Classroom	
<b>Sabra E. Brock, Yogini Joglekar, Ayushi Tandon, Gena Bardwell</b> .....	<b>353-369</b>
A Work Systems View of Unplanned Business Process Change: The Case of #FEESMUSTFALL at a South African University	
<b>Trevor Joubert, Lisa F Seymour</b> .....	<b>371-395</b>
Integrating Drone Technology in STEM Education: A Case Study to Assess Teachers’ Readiness and Training Needs	
<b>Wing Shui Ng, Gary Cheng</b> .....	<b>397</b>
Business Priorities Driving BYOD Adoption: A Case Study of a South African Financial Services Organization	
<b>Jacques Ophoff, Steve Miller</b> .....	<b>399</b>
Exploring the Development of a Framework for Informal E-mentoring of Online Health Education Students: A Formative Evaluation [Research in Progress]	
<b>Sherry Tarver-Grover</b> .....	<b>401-404</b>
Transition to First Year University Study: A Qualitative Descriptive Study on the Psychosocial and Emotional Impacts of a Science Workshop	
<b>Jyothi Thalluri, Joy Penman</b> .....	<b>405</b>
Synthesizing Design and Informing Science Rationales for Driving a Decentralized Generative Knowledge Management Agenda	
<b>Ulrich Schmitt, Grandon Gill</b> .....	<b>407</b>
A Review of Project Management Course Syllabi to Determine if They Reflect the Learner-centred Course Pedagogy [Abstract]	
<b>Erastus Karanja, Donna Grant</b> .....	<b>409-411</b>
Professional Life of Information System Graduates—Impressions and Experiences	
<b>Georg Disterer</b> .....	<b>413-427</b>
E-Safety in the Use of Social Networking Apps by Children, Adolescents, and Young Adults	
<b>Gila Cohen Zilka</b> .....	<b>429</b>
Self-efficacy, Challenge, Threat and Motivation in Virtual and Blended Courses on Multicultural Campuses	
<b>Revital Cohen, Ilan Rahimi, Gila Cohen Zilka</b> .....	<b>431</b>
Autoethnography of the Cultural Competence Exhibited at an African American Weekly Newspaper Organization	
<b>Erik Bean</b> .....	<b>433</b>
Factors Influencing Women’s Decision to Study Computer Science: Is It Context Dependent?	
<b>Sarah Genut, Bnaya Ori, Yifat Ben-David Kolikant</b> .....	<b>435</b>

Usage Habits in Music Streaming Applications and Their Influence on Privacy Related Issues [Research in Progress]	
<b>Maor Weinberger, Dan Bouhnik</b> .....	437-447
Engaging Maritime Students in Lifelong Learning as Teacher's Prime Mission [Abstract]	
<b>Olga Zavalniuk, Volodymyr Nesterenko, Inna Zavalniuk</b> .....	449-452
Remaining Connected with our Graduates: A Pilot Study	
<b>Joy Penman, Eddie L Robinson, Wendy M Cross</b> .....	453
Technology in the Classroom: Teachers' Technology Choices in Relation to Content Creation and Distribution	
<b>Suzanne I. Sackstein, Linda Spark, Bryan Turner</b> .....	455
The Competencies Required for the BPA Role: An Analysis of the Kenyan Context	
<b>Elizabeth W Wamicha, Lisa F Seymour</b> .....	457
Educational Technology in IT and Marketing Education - The Experience of Early Thai Educators [Abstract]	
<b>Yupawan Vannavanit</b> .....	459-460
Extracting and Tagging Unstructured Citation of a Hebrew Religious Document	
<b>Dror Mughaz, Yaakov HaCohen-Kerner, Dov Gabbay</b> .....	461-473
Emoji Identification and Prediction in Hebrew Political Corpus	
<b>Chaya Liebeskind</b> .....	475-491
The Benefit of Information in a Single-server Queue with Heterogeneous Service Valuations [Abstract]	
<b>Irit Nowik, Refael Hassin, Yair Shaki</b> .....	493-494
The Benefits and Challenges of Living, Teaching and Working in Today's Diverse World	
<b>Henry O'Lawrence</b> .....	495-499
Systematic Improvement of User Engagement with Academic Titles using Computational Linguistics	
<b>Nim Dvir, Ruti Gafni</b> .....	501-512
Transforming a First-year Accounting Course Using a Blended Learning Pathway	
<b>Clara Nkhoma, Mathews Nkhoma, Susan Thomas, Long Ky Tu, Nha Quoc Le</b> .....	513
The Impact of Contribution in Aid of Construction on Utility Dilapidated Infrastructure: Evidence from the State of Florida [Abstract]	
<b>Daniel Acheampong, Tanya S. Benford, Carlos Ramos</b> .....	515-517
An Examination of the Barriers to Leadership for Faculty of Color at U.S. Universities	
<b>Sydney Freeman Jr., Karen Krier, Ahmed A. Al-Asfour, Russell Thacker</b> .....	519
The Use of ICT by SMMEs in a Digital Economy: A Case Study in Buffalo City Metropolitan in South Africa [Abstract]	
<b>Agyei Fosu</b> .....	521-522

## ***Workshop Presentations***

Workshop: Emerging Online Tools to Enhance Scholarly Reputation and Visibility	
<b>Meg Murray, Jorge Pérez</b> .....	901-903
Workshop: Information Search & Discovery, Using an Image as Query	
<b>Paul Nieuwenhuysen</b> .....	905-909

## ***Review Process***

Unless otherwise noted, all papers were reviewed blindly (that is, with author and affiliation information removed) by between 6 and 10 external reviewers. The reviewers did not know the identity of the authors nor the authors the identity of the reviewers. Reviewers were matched to papers using a formula to minimize the psychological distance between reviewers' stated expertise and interest and the topics covered in the paper. In cases where this formula did not provide at least 6 reviewers, reviewers were randomly assigned to papers. No reviewer was required to review more than 3 papers.

Reviewers were instructed to mentor the authors by providing feedback on how to improve the submission. They were further required to recommend whether or not the paper should be accepted using a six-point scale (from "reject" to "must accept").

The authors of all papers, whether accepted or not, were provided with the reviewers' feedback as part of our process of mentoring authors. Authors of accepted papers were required to revise their submissions in light of the issues raised in the reviews.

Selected proceedings papers were revised and published in the 2019 volume of one of the Informing Science Institute journals.

We believe that the papers in these proceedings represent a great contribution to science.