



**NEW YORK CITY  
COLLEGE OF TECHNOLOGY**

THE CITY UNIVERSITY OF NEW YORK

300 JAY STREET, BROOKLYN, NY 11201-1909

**PDAC BOOK OF ABSTRACTS: 2015-2016 ACADEMIC YEAR**

**Rose Abreu**

**Assistant Professor, Hospitality Management**

**Presentation Title**

The Second International Congress Historical links between Spain and North America present, past, future. May 3-5, 2016

**Paella a fusion of cultures**

The Second International Congress 2016, Historical links between links between Spain and North America present, past, future. May 3-5, 2016

**Abstract:**

Paella is a popular dish of Spanish origin found on menus throughout North America. Historically, the rice dish was known as a “peasant meal” cooked outdoors and eaten communally by African Berbers who were brought to Spain by the Arabs to work the rice fields. The dish was named for the Latin name of the pan in which it was cooked the “patella”. The main ingredients of Paella were once rice, snails, and eels from the Albufera Lake region and vegetables from nearby gardens. Paella was influenced by several distinct cultures in Spain, incorporating the culinary traditions of Arabs, Jews and Christians. Although scholars have argued that Paella did not influence dishes in North America this research will demonstrate the cultural and regional influences of Paella in North America. In addition, it will illustrate the versatility of the dish as adapted and reinvented by other migrant groups.

**Alyssa Dana Adomaitis**

**Assistant Professor, Business**

With academic positions being scarce, especially in the field of Apparel and Textiles for tenure-track, instructor, and adjunct lecture positions, negotiating a position can be nerve-wracking, daunting, and exciting. Many academicians, particularly women, have a difficult time knowing their respective personal value and how to communicate and negotiate for a competitive salary, benefits, and start-up package that they feel is commensurate to their research, industry and teaching experience. This session is beyond just communication, but strategizing and negotiating the politics of promotion and tenure, departmental or college re-organizations, relocation or interviewing elsewhere to increase one's market value, and playing the political game on many campuses. The session is also inclusive of balancing a satisfying career and motherhood. Upon review completion of work and professional progress, it is important to stay focused and motivated, and make wise decisions that best suit outlined career goals. Post tenure is when, if done in a suitable manner, one's academic value increases.

It is important to tactfully assure adequate compensation and positive perceptions of the value of one's professional work and experience. In this session, topics to be covered will be : (a) overview of the application process, (b) appropriate timing for moving or leveraging the value of your position (c) personal branding strategies (d) negotiation of salary and benefits package (e) promotion and tenure (f) appeals process (g) trends in academia and (h) lessons learned from faculty in different positions in academia. Women in the workplace can be hindered in their continued professional growth by preconceived notions and assumptions. This special seminar can benefit many faculty including new doctoral students, instructors or lecturers, assistant professors and associate professors who are looking for career advancement strategies.

Many academicians, particularly women, have a difficult time knowing their respective personal value and how to communicate and negotiate for a competitive salary, benefits, and start-up package that they feel is commensurate to their research, industry and teaching experience. This session is about strategizing and negotiating the politics of promotion and tenure, departmental or college re-organizations, relocation or interviewing elsewhere to increase one's market value, and playing the political game on many campuses.

**Phillip Anzalone, AIA**  
**Assistant Professor, Architectural**

Drawing on the theme of Practice and Academic Partnership of the annual Design Conference organized by the American Institute of Architects New York State Chapter, the sessions seek to explore the intertwined relationship between practicing architects, architectural students and research derived from academia. Architects, Industry and Educators from across the State came together to share unique opinions, explore new concepts, foster professional development and socialize with fellow colleagues/. Over the four-day event, the Conference provided many opportunities for continuing education, personal growth, tours, networking opportunities, as well as an expo to showcase new products and technologies. When theory and practice converge, it presents an opportunity to collaborate and invest in ourselves as architects.

Pop-ups and temporary design installations have the power to attract attention, display experimentation and new possibilities in the field of architecture, and raise professional profiles

for emerging firms. This session focused on how young architects and emerging professionals – both within and outside of academia – are using small-scale temporary design and pop-up installations to achieve personal design goals while promoting public awareness of the power of design. Leading designers and professors highlighted a variety of installations, and introduced strategies for creating small-scale, temporary projects.

Discussions surrounded the formation of programs that link emerging professionals to practice and industry through applied research, design, and construction. By working on small-scale projects, including areas not traditionally part of the architectural study, such as procurement, assembly, inventory, shipping, fund raising, and other construction concerns, emerging professionals engage and enhance cultural environments, as well as expose new work to potential clients.

The session was approved by the American Institute of Architects to provide continuing education credit of 1.5 LU hours.

**Jill Belli**  
**Assistant Professor, English**

In October 2015, I attended a major international conference at Millersville University, in Lancaster, PA: Affect Theory Conference: Worldings/Tensions/Futures. The presentations I heard (including those from a series of leading scholars in the field) and the informal conversations I had with colleagues there helped me to develop my thinking/research/writing as a happiness researcher, and to work on my own scholarship on affect in the context of positive psychology, pop culture, the digital, politics, and education. I also regularly teach courses related to happiness at City Tech (most recently in my Learning Community with HUS in Fall 2014, and my interdisciplinary module with ARCH in Spring 2015), so this conference benefitted my pedagogy as well.

**Mercer R. Brugler**  
**Assistant Professor, Biological Sciences**

My research program (housed at the American Museum of Natural History) centers around Next-Generation DNA Sequencing and analysis of extremely large datasets generated by cutting-edge DNA sequencing platforms. The NGS field is changing rapidly, including the sequencing platforms and programs/tools to analyze data. To put this change in perspective, my colleagues and I just finished sequencing the complete nuclear genome of the common bed bug (cost: ~\$120K), and the NGS platform we used to conduct the sequencing is already obsolete (manuscript in press at *Nature Communications*). This two-week summer course/workshop, taught by the world's experts in NGS and analysis, will deepen my knowledge in terms of analyzing short-read sequencing data from Illumina and other next-gen platforms (e.g., 10X Genomics and Oxford Nanopore MinION). The first week will introduce me to computational thinking and large-scale data analysis on UNIX platforms. The second week will focus on

mapping, assembly, and analysis of short-read data for resequencing, CHIP-Seq and RNAseq. I will also gain experience in Python and bash shell scripting, basic software installation on UNIX, installing and running Bowtie, Trinity, Velvet, SPAdes and other bioinformatic tools, querying mapping and evaluating assemblies, and cloud computing using Amazon's EC2. The latter is particularly relevant as I (under the umbrella of CityTech) was recently selected to participate in Amazon Web Service's (AWS) "Engage" program, which is the codename for a confidential, not-yet-released AWS program designed to significantly scale grant-based AWS resources that Amazon provides to universities, educators and students. By the end of the course, I will be able to map short-read data to sequenced genomes and query the mapping for variation, transcript prevalence, and enriched genomic regions. All knowledge gained at this course/workshop will be passed on to the many CityTech students that I mentor in my molecular lab at the American Museum of Natural History as well as my fellow colleagues conducting NGS-related research within CityTech's Biological Sciences Department.

**Renata Budny**  
**Assistant Professor, Restorative Dentistry**

The Kois Center provides world-class comprehensive curriculum for dental professional. Dentists and dental technicians come from all over the world to learn from Dr. John C. Kois. When the opportunity to obtain a grant to study at Kois Center presented itself, I send out my application immediately. To my surprise, I was awarded the Kois Center Education Grant from the Foundation for Dental Laboratory Technology in January 2015.

I have always dreamed about attending Kois Center courses and I was not disillusioned when I completed two of them, Biomechanics I and Biomechanics II. During October 12-16, 2015 training that I attended, there were 23 dentists, 3 dental technicians and 4 mentors attending both courses. The participants came from Asia, North and South America, and Europe.

The Kois curriculum comprising of 9 courses including topics such as treatment planning, functional occlusion, periodontal interface, biomechanics, implants: fixed and removable retained is fully supported by material sciences, clinical implications and conception of final therapies. The topics presented by Dr. Kois are deeply supported by his clinical experiences as well as by years of scientific dental research conducted by scientists around the world. During the course, the interaction between Dr. J. Kois, the experienced dentists and technicians was captivating. The high level of respect and understanding for each other's responsibilities was highly felt. The real life dental cases brought by the participants were very helpful. They were discussed in detail from periodontal, biomechanical, functional, and dentofacial perspectives with emphasis on pre-treatment and post-treatment risk assessment. The comprehensive treatments were proposed. During the 5-day intense course Dr. Kois continuously referred to the collaboration and communication between members of the dental team to produce best outcomes for the patients.

The Kois Center Grant provided me with the new experiences and expanded my horizons on many levels. Upon my return I was able to share my experiences with Restorative Dentistry faculty members and students as well as with fellow dental technicians. I am now very excited about applying what I have learned at Kois

Center and advancing the Restorative Dentistry curriculum. I hope to open the minds of our students to continue lifelong learning and to help them become more valuable dental team players when entering the world of dental technology.

I am very grateful to the Foundation for Dental Laboratory Technology and to Kois Center for granting me such prestigious honor.

**Juanita But**  
**Associate Professor , English Department**

*Reading Effectively in STEM Disciplines*

Reading Effectively Across the Disciplines (READ) at New York City College of technology is a project that focuses specifically on improving students' disciplinary literacy and higher order thinking skills. READ accomplishes its goals through course redesign, pedagogical development, and active reading strategies implemented by classroom instruction and Peer-led Team Learning. This presentation features the project's structure and implementation, assessment results of READ sections in Biology and Electromechanical Engineering Technology, current focus on STEM disciplines, and future directions.

**Aparicio Carranza, PhD and (et. al)**  
**Associate Professor, Computer Engineering Technology**

The growing number and variety of computer security threats has led to an increased interest in cybersecurity education, and the exploration of novel approaches to undergraduate courses in this field. We discuss a new approach for training nontraditional and under-represented students at The City University of New York. Learning objectives, class resources, and results of recent student information security projects will be presented. We also discuss opportunities for academic and industry partnership collaboration with the New York State Cloud Computing and Analytics Center at Marist College.

**Sandra Cheng, PhD**  
Associate Professor  
Art History  
Humanities Department

**The Ugly Line: Early Modern Writers on Caricature**  
Renaissance Society of America, March 31-April 2, 2016  
Italian *Caricatura*: Material Practice, Collectors, and Art Theory

**ABSTRACT**

Caricature flourished with the practice of gifted draftsmen such as the Carracci and their followers, Guercino, Bernini, and Mola. Corresponding to its popularity were attempts to define and to critique the novel genre, including Giovanni Antonio Massani's significant framework of *perfetta diformità* of 1646. With the exception of Massani's defense of caricature, what early modern writers thought about caricature has to be gleaned from references in artists' biographies, correspondence, and art treatises. Writers identified caricature as a unique mode of draftsmanship that privileged ugliness, and they discussed the genre in terms of artistic wit, imitation, and even style. This paper examines the textual sources of Mancini, Bellori, Malvasia, and Baldinucci to highlight their shared positions and ambiguities in delineating a new type of drawing that was not quite a portrait or a sketch.

**Jean F. Claude, CHE, CCE**  
**Associate Professor, Hospitality Management**

Since 2011, CUNY has been involved in a program to support and reinforce higher education in Haiti. The program is essential to the economic development of the country and building the self-esteem of inner-city youth in that community. Based on meetings with Haitian educators and government officials it was decided that CUNY would initially support the development and consolidation of Haiti's public university network in the regions including the Public University in the North at Cap-Haitien (UPNCH). The targeting of public regional institutions outside of Port au Prince is consistent with recommendations that emphasize decentralizing higher education, promoting greater access, broadening workforce development opportunities and strengthening regional economies.

In the short term CUNY has been providing support for academic programs that have relevance for workforce and economic development. Tourism and Hospitality were identified as potential curriculum priority areas.

I have been working with the project for over 4 years. In my capacity as visiting professor, I worked in collaboration with faculty members from different CUNY colleges to travel to Haiti to teach at UPNCH where the hospitality management program is located. Last summer, two students of Haitian origin were selected to travel to Haiti to assist in the culinary labs from July 6 to August 14. They were very eager to contribute to the program and wanted to create a positive learning experience for themselves and all students and adults alike in Haiti. They spent one month working side by side in the class room with me and Haitian instructors as lab assistants while creating a learning community with their Haitian colleagues. That was a unique opportunity for these them to get involve and experience Haitian foods, ingredients and the culture.

The CUNY sponsored program in Haiti is well-renowned in the nation for its success, longevity, and unique vocation in meeting the needs of young people. This collaboration offers an exceptional opportunity to train and elevate the level of workers in the hospitality industry in the northern region of Haiti especially in Cap-Haitien. The project is already making its marks in enhance guests' service, improve food and beverage management, ameliorate guest's satisfaction

and increase guest's retention as well as develops the communication skills for many Haitian workers. The continuation of the program will reinforce the engagement between CUNY and the public universities in Haiti, to educate and to create opportunities for Haitians living in Haiti and abroad.

**Kenneth Conzelmann, AIA, ARA**  
**Assistant Professor, Architecture**

The U.S. Department of Energy's Solar Decathlon challenges collegiate teams to design, build, and operate solar-powered houses that are affordable, energy-efficient, and attractive. The winner of the competition is the team that best blends cost-effectiveness, consumer appeal, and design excellence with optimal energy production and maximum efficiency.

In 2013, City Tech's application, along with 19 other college teams, was selected by the Solar Decathlon committee. Students and faculty along with real world professionals worked together in and outside of class to conceive, design and then physically build the solar house at the Brooklyn Navy Yard. Once completed, the house was disassembled into its planned modules and transported on six flatbed trucks across the country to Irvine California, just south of Los Angeles. There it was reassembled and prepared for competition with the other remaining 13 college teams, making City Tech one of the Finalists.

Participation at the Irvine competition allowed me to help with the Public Exhibition of the teamDURA house where students, organized in four-hour shifts, greeted the thousands of visitors and gave tours with detailed descriptions of all aspects of its design intentions and use. I was able to conduct one-on-one video interviews with several students who provided honest, insightful perspectives of their experiences and made suggestions as to how things might be improved for the next time. And for contextual perspective, I also prepared a still-photo virtual tour of all houses on display in the Solar Decathlon Village. These Interview videos and Virtual Village Tour slides are now showing in Voorhees Hall for all to stop, listen and learn of the monumental achievements of our students, faculty and supporting friend

**Cailean Cooney, MLIS**  
**Instructor, Library**

Open educational resources (OER) are becoming more prevalent at the college level but they remain brand new to many instructors. Engage OER's purpose is to create a familiar entry point for faculty to engage critically with, and gain awareness of OER. Thus, faculty will generate reviews that evaluate OER content quality, subject coverage, and pedagogical rigor. Reviews are to be published openly, and will become a resource for other instructors to consult when they consider new curricular materials.

This project has been proposed for inclusion in the Journal of Interactive Technology and Pedagogy with the goal of recruiting current PhD students and early career faculty to review open textbooks in the Social Sciences, Biology, Chemistry, and Mathematics. Relevant teaching experience required.

**Susan Davide**  
**Assistant Professor, Dental Hygiene**

Course: *The Complete Dental Hygiene Preclinic Course (4ceu's)*

I was an attendee of this course and it provided an immense amount of valuable information and material that I have already incorporated into the course I teach here at CityTech: DEN 1100/1100L Principles of Dental Hygiene Care I in the fall semester. Everything to teach preclinic was included: the syllabus, course calendar, instructor calibration guide to teach each module using the course textbook, PowerPoint presentations, evaluation system, test bank and DVD "Precision in Periodontal Instrumentation 2<sup>nd</sup> Ed." For student demonstrations (four have been secured and available in the SLC as of this fall semester). The course instructor guided us through the process of teaching each module, calibrating the faculty, and teaching and evaluation the students. The entire course was provided on a flash drive as part of the course tuition. One evaluation method that I have added to this semester's course is a mid-term clinical instrumentation skills practicum. A student's practicum grade is based on the evaluations from a total of three instructors and provides feedback base on tallied findings by the group, rather than findings from one instructor. I am excited about all these newly added materials and look forward to implementing them and seeing the results!

Course: *Dental Hygiene Clinical Teaching Methodology (11.5 ceu's)*

I attended this workshop which provided me with methods of teaching all phases of clinical dental hygiene education with the emphasis of progression of skill development throughout the clinical education course.

Two hands-on components were included: teaching basic periodontal instrumentation to students and the other was a hands-on teaching advance root instrumentation using hand and ultrasonic techniques. Again, all aspects of clinical curriculum documents were included in electronic format on the course flash drive. Solutions for dealing with student issues in the clinic learning environment was also discussed and maximizing student learning through faculty calibration in a well-structured clinical curriculum. It was an extremely resourceful course and I learned many new innovations that I hope to use and apply here at CityTech.

**Lynda Dias**  
**Assistant Professor, Hospitality Management**

Effects of a Career Development Course on Hospitality Students' Career Decision-Making Self-Efficacy

The purpose of this study was to evaluate how students in the hospitality management department at New York City College of Technology, of the City University of New York (CUNY), rated their preparedness for entry into the hospitality industry before and after taking a disciplined-based career development course (HMG 2308). Using the Career Decision Self-Efficacy Scale-Short Form (CDSE-SF) developed by Betz and Taylor (1983), five competencies – accurate self-appraisal, gathering occupational information, goals selection, making plans for the future and problem solving and their subscales – were surveyed in 58 students over two semesters. The results of the investigation revealed an increase in students' perception of their preparedness for a career in the Hospitality Industry after completing a career development course. Implications for students, educators and the hospitality industry are discussed.

**Samar ElHitti**

**Assistant Professor, Mathematics**

The Special Session on Advances in Valuation Theory co-organized with Professor Schoutens (NYCCT) and Franz-Viktor Kuhlmann (University of Katowice, Poland) brought in 16 of the top researchers in the field from France, Germany, UK, Poland, Canada as well as from across the US (8 states including New York). The talks were centered on the latest developments in four major topics in the field: Total blow-ups and ring theory of valuations, Henselian, large and extremal fields, model-theory of valuations, Resolution of Singularities and value semi-groups and Birational Anabelian Geometry.

**Kylie Garcelon**

**Assistant Professor, Hospitality Management**

The honor of being selected as a judge for these prestigious international awards celebrating the best creative, journalistic and academic works of culinary professionals around the world was a highlight of my career to date. This was a demanding and valuable experience that required me to utilize and sharpen my skills as a culinarian and as a creator and artist of digital media. The judging experience gave me the opportunity to increase my knowledge of what culinary professionals are currently doing in the hospitality industry with their embracing of, and utilization of digital media. Increasingly, culinary professionals are required to create their own digital media and use digital media for self-promotion, education and increasing public awareness of social issues inter alia. As an educator in 2016, I must be at the forefront of this movement to be able to equip my students with these 21st century skills. The rise of food in pop culture has placed new demands on Chefs and food and beverage professionals as creators, consumers and users of digital media and its related technology. Creative digital expression is an intrinsic part of these new demands. Attending the conference allowed me to interact with other culinary professionals and educators to swap ideas, best practices and these meetings inspired me to evaluate my own praxis.

**Ruth G. Garcia, PhD**

**Assistant Professor, English**

In this paper I examine Mary Wollstonecraft's unfinished novel, *Maria*, which tells the story of the titular heroine who is wrongly incarcerated because her husband wants to steal her fortune. There she meets Jemima, her warden, and Danford, another wrongly incarcerated inmate of the asylum with whom she falls in love. For the purposes of the paper, I focus on the scene in a novel where Maria, Jemima, and Darnford connect with each other, which inspires them to tell each other their life stories. I argue that in this particular moment the cell unexpectedly becomes a women's community that has parallels with the women's communities of female utopias like those imagined by Mary Astell, Margaret Cavendish, Sarah Fielding, and Sarah Scott. Specifically, it is my opinion that this moment of community blurs the class hierarchy through Jemima's storytelling; this challenge to the power dynamics of social rank is suggested by the influence Jemima's tale has on Maria, and by the similarities Maria recognizes exist between her own and Jemima's experiences.

**John Huntington**  
**Professor, Entertainment**

John Huntington, author of *Show Networks and Control Systems*, introduces networks and their applications on shows. Key protocols such TCP/UDP/IP will be introduced, and basic network topology issues will be covered. Key aspects of network operation will be demonstrated. This session qualifies for 1.5 ETCP renewal credits.

**Daeho Kang, PhD**  
**Assistant Professor, Environmental Engineering**

In order to address the lack of reliable methods that can analyze the overall effects of PDEC tower with a spray system, analytical models that predict supply air conditions of the system were implemented into a whole building energy simulation program EnergyPlus. This paper describes the simulation algorithm of the new module to predict the performance of the system. Case studies were performed to verify the capability of the module. The results of the case studies showed that the module adequately predicted the supply air conditions, and it was also capable of estimating energy performance and indoor thermal environment when the system served as a primary cooling system.

**Nadia Stoyanova Kennedy Rank: Assistant Professor**  
**Discipline: Mathematics Education**  
**Department: Mathematics**

Conference Title and Date: Biennial Conference of the North American Association for Community of Inquiry, June 17-20, Montclair State University, Montclair, NJ  
<http://www.naaci-philosophy.org/2016-conference-presenters/>

Conference Theme: Development and educational application of community of inquiry (CI) theory and practice; The uses of Community of Inquiry in teacher education

Presentation Title: **What Can Philosophical Inquiry Bring to the Mathematics Classroom?**

*Abstract:*

In this presentation I will explore the potential contributions of opening a philosophical dimension in regular math classes in situations in which mathematics is used to model complex social phenomena and to make decisions on issues like water sharing or the value of recycling. I will argue that philosophical inquiry can facilitate a) an understanding among students of the power and the limits of math models, b) an understanding of what the modeling process involves, and c) an awareness that the potential and the limits of math models are two sides of the same coin.

Presentation Title: **The Role of the Facilitator (Teacher) in a Community of Inquiry from Complexity Theory Perspective**, part of a panel “**Community of Inquiry in the Lens of Complexity Theory.**”

*Abstract:*

The paper identifies several characteristics of social systems dedicated to inquiry that are open (as opposed to “control” systems)—autopoiesis, teleology, feedback, noise, redundancy, ambiguous control, and system “event”—and traces their function in the ongoing reconstruction of argument that collective, dialogical inquiry entails. The role of a facilitator (teacher) in such a system is to provide both positive and negative feedback, navigating between system stagnation and system chaos. The autopoietic inquiring system is offered as one exemplar of the “ideal speech situation,” which requires that all its members have equal opportunity to participate in and contribute to system emergence, free from internal constraints or external coercion. This implies the need for a pedagogy that not only develops communicative competence, but which models a form of argumentation that understands itself as a collective project of ongoing reconstruction—with the major goal of agreement arrived at through open, free communication.

**Raffi Khatchadourian**  
**Assistant Professor, Computer Systems**

Pointcut fragility is a well-documented problem in Aspect-Oriented Programming; changes to the base-code can lead to join points incorrectly falling in or out of the scope of pointcuts. Deciding which pointcuts have broken due to base-code changes is a daunting venture, especially in large and complex systems. We demonstrate an automated tool called FRAGLIGHT that recommends a set of pointcuts that are likely to require modification due to a particular base-code change. The underlying approach is rooted in harnessing unique and arbitrarily deep

structural commonality between program elements corresponding to join points selected by a pointcut in a particular software version. Patterns describing such commonality are used to recommend pointcuts that have potentially broken with a degree of confidence as the developer is typing. Our tool is implemented as an extension to the Mylyn Eclipse IDE plug-in, which maintains focused contexts of entities relevant to a task.

**Heejun Kim, PhD**

**Assistant Professor, Hospitality Management**

The purpose of this research is threefold: (1) to segment repeat visitors based upon the frequency of leisure trip, (2) to explore travel motivations of repeat visitations, and (3) to assess the economic impact of the various repeat visitor groups. The contribution of seven motivational factors (e.g., distance to destination, a variety of activities, destination familiarity, attractions/heritage sites, visiting family/friends, shopping, others) was measured on the level of repeat visitations. A mail survey was conducted between 2013 and 2014 to those who had traveled Northern Indiana, USA. Survey respondents were clustered into two repeat visitor groups based on the travel frequency to the destination. The results of discriminant analysis indicate that distance to destination, visiting friends/relatives, and shopping have a statistically significant impact on the level of repeat visitation.

**Ohbong Kwon, PhD**

**Assistant Professor, Computer Engineering**

A college-wide reading assessment conducted in 2012 (8 sections, N=148) at New York City College of technology, or City Tech, showed that only less than 30% of our students were college ready in reading, much lower than the national average of 50% (ACT, 2012). This weakness is a major obstacle to succeed in college-level courses, especially for beginning engineering students. The reading level of engineering texts is extremely complex, with various levels of readability and specialized concepts, formula, and vocabulary. However, engineering faculty at City Tech are seldom equipped with instructional strategies to scaffold reading assignments and use formative assessments to ensure students' completion of required readings and help them understand essential and complex ideas in engineering texts. To address this problem, a college-wide Reading Effectively Across the Disciplines (READ) program was established in Spring 2013 to improve disciplinary literacy. READ also broadly aims at increasing retention, engagement, and addressing the major issue of early and unofficial withdrawals. The targeted engineering courses in READ include EMT1130 (Electro-Mechanical Manufacturing Lab) in 2013-1014 and EMT1150 (Electrical Circuits) in 2014-2015. Both are required first-year courses for the AAS Degree in Electro-Mechanical Engineering Technology. Failure/withdrawal rates of both courses were over 30%. In this paper, we will give an overview of the READ program and describe how its components work together to improve student reading and performance in first-year engineering courses. Our focus is to describe our design and implementation of effective strategies, teaching and assessment tools in enhancing students'

disciplinary literacy in EMT1130 and EMT1150. We will also discuss and analyze our assessment data and pilot results, which showed significant improvement in performance and pass rates among students who were enrolled in the READ sections of both courses, EMT1130 (7 sections, N=150) and EMT1150 (3 sections, N=65), compared to those who were not.

**Anty Lam, RDH MPH**  
**Associate Professor, Dental Hygiene**

The conference was for dental hygiene faculty members who are teaching dental public health or community dental health within the dental hygiene curriculum, either at Associate's or Bachelor's level. The 3-day workshop emphasized networking groups to help educators enhance their course, share ideas and brainstorm solutions to teaching dilemmas. The course provided teaching strategies and techniques to ease the transition of applying dental public health theories taught in class to practical field experience; various service learning projects were shared during Lunch and Learn sessions and PowerPoint presentations. Also, the 2016 Dental Hygiene Accreditation Standards related to dental public health were highlighted throughout the conference.

**Reneta D. Lansiquot, PhD**  
**Associate Professor, English**

Interdisciplinary studies help students achieve the learning goal of making meaningful and multiple connections among the liberal arts, as well as among the liberal arts and the areas of study leading to a major or profession. This innovation/ideation session focuses on implementing lessons learned from mixed-methodology educational research to engage all students in problem solving with computer programming via a general education interdisciplinary course for non-computer majors, *Programming Narratives: Computer Animated Storytelling*, and a narrative case study module for majors. In the co-taught course we created, through the study of the structure of narrative, concepts of problem solving, and the logic of computer programming languages, students develop a narrative-driven video game prototype. Emphasis is placed on creative writing and computational thinking. We also created a narrative module to help students develop narrative and writing skills that can be incorporated in all sections of the introductory computer programming courses.

**David Lee**  
**Assistant Professor, Humanities**

Science center exhibitions about health are designed to impart information but they can also be conceived of as persuasive, because they urge the visitor to quit smoking, exercise more, etc. The "take-away message" about health is stated in health related exhibits, but often it is only implicit. For example, an exhibit that lists 443 toxic chemicals in cigarette smoke, but contains no explicit recommendation to quit smoking. In this case, it is up to the visitor to infer the harm caused by the toxins and to come to a logical conclusion about quitting based on this. When a visitor interacts with a health related exhibit, they sometimes need to "fill in the blanks" and derive the health-related implications from the information they uncover during their course of interaction

with it. Good persuasive arguments build on evidence, and when persuasive multimedia health messages are done right, the behavior-change implications should follow as result of the evidence. But health related exhibits contain multi-media messages about how to stay healthy, including text, images, interactives and models, so they don't appear to us readily as verbal arguments. Therefore they are examples of what Walter Ong (1982) calls "secondary orality" because they are semi-verbal messages that can be analyzed as a type of utterance. Using ideas from speech act theory and rhetorical criticism provides a revolutionary new way of looking at health related exhibits as forms of persuasive argument. This paper considers health communication exhibits in science centers as visual enthymemes composed of speech acts in sequence. *Indirect speech acts* are kinds of purposeful messages (such as commands and suggestions) that are stated otherwise. An *enthymeme* is a form of syllogistic argument that is missing a conclusion or premise, requiring the listener to fill in the blanks. This paper argues that speech acts appear in sequence in health related exhibits, building a case for the visitor to change their lifestyle in some way. The indirect speech act and enthymeme are explained, and health communication and health exhibits are considered syllogistically. By describing multi-media messages as arguments we can see how visual rhetoric opens up new lines of inquiry for health communication theory and method.

**Xiangdong Li, Ph.D.**

Professor

Computer Systems Technology

**Presentation Title:**

Active Quantum Walks: A Framework for Quantum Walks with Adiabatic Quantum Evolution  
2016 SPIE Defense + Commercial Sensing (4/17 - 4/21, 2016)

**ABSTRACT**

We study a new methodology for quantum walk based algorithms. Different from the passive quantum walk, in which a walker is guided by a quantum walk procedure, the new framework that we developed allows the walker to move by an adiabatic procedure of quantum evolution, as an active way. The use of this active quantum walk is helpful to develop new quantum walk based searching and optimization algorithms.

**Ariyeh H. Maller**

**Associate Professor, Physics**

Cosmological hydrodynamical simulations are one of the main techniques used to understand galaxy formation and evolution. However, it is far from clear to what extent different numerical techniques and different implementations of feedback yield different results. The Scylla Multi-Code Comparison Project seeks to address this issue by running identical initial condition simulations with different popular hydrodynamic galaxy formation codes. Here we compare simulations of a Milky Way mass halo using the codes enzo, ramses, art, arepo and gizmo-psph. The different runs produce galaxies with a variety of properties. There are many differences, but also many similarities. For example we find that in all runs cold flow disks exist; extended gas structures, far beyond the galactic disk, that show signs of rotation. Also, the angular momentum of warm gas in the halo is much larger than the angular momentum of the dark matter. We also

find notable differences between runs. The temperature and density distribution of hot gas can differ by over an order of magnitude between codes and the stellar mass to halo mass relation also varies widely. These results suggest that observations of galaxy gas halos and the stellar mass to halo mass relation can be used to constrain the correct model of feedback.

**Ariane Masuda, PhD**  
**Assistant Professor, Mathematics**

### *The Calkin-Wilf Tree*

The Calkin-Wilf tree is an infinite binary tree whose vertex set consists of all positive rational numbers. We will discuss a generalization based on two parameters,  $U$  and  $v$ , referred to as the  $(u,v)$ -Calkin-Wilf tree. We will also speak about the linear fractional transformation analogue of the Calkin-Wilf tree and some applications. This is joint work with Sandie Han, Satyanand Singh, and Johann Thiel.

### *12th International Conference on Finite Fields and Applications, Fq12*

After twenty years, the biannual conference on finite fields is back in the United States. I had attended the previous editions in Oaxaca, Mexico, in 2001, and in Toulouse, France, in 2003. This is one of the largest conferences in my research area. I attended many interesting talks, met several former collaborators, and interacted with several researchers. I was the Chair of a session of talks on algebraic curves over finite fields. One of my collaborators and I used the free time in the meeting to work on our project on Kummer curves.

**John McCullough**  
*Assistant Professor*  
*Entertainment Technology*

### **Tech Expo: Theatre Technology Exhibit**

#### **ABSTRACT**

The Tech Expo is a juried exhibition of entertainment technology projects presented every two years at USITT's annual conference and stage expo. Selected projects are displayed at the stage expo and are published in the *Tech Expo* catalog. I am on the planning committee, and serve as an adjudicator and editor. This was a planning year, so we had a floor display to solicit applications for the 2017 contest and a planning meeting to approve new bylaws and plan the year's activities.

**USITT New York Area Section Meeting**  
*United States Institute for Theatre Technology Annual Conference and Stage Expo 2015*

#### **ABSTRACT**

The NY Area Section of USITT is the regional section with membership from the five boroughs, southwestern Connecticut, and northern New Jersey. It provides programming for members in the tri-state area with a focus on creating support for student and early-career members. I am a Delegate-at-large and will be chairing the student contest ad-hoc committee this year. Our business at this meeting included welcoming new members and forming ad-hoc committees to lead our projects for the upcoming year.

**Djafar K. Mynbaev**  
**Assistant Professor, ETET**

Optical communications is at the turning point of its development: To deliver exponentially increasing volume of telecommunications traffic the industry must properly increase the transmission capacity of optical networks, which is approaching the nonlinear Shannon limit. In other words, the current optical communications technology based on silica optical fiber faces its spectral limits. The possible solutions to this problem must be found within the optical spectrum, and therefore should use non-traditional optical and electronic approaches to developing new devices and systems capable to meet the future requirements.

This presentation presents the main problems optical communications are encountering at this stage and considers the possible directions of its future development. The goal is to attract attention of the research community to the needs of further developments of optical communications; that is, to the search of new phenomena, new materials and new applications of known phenomena.

**Hamid Norouzi, PhD, PE**  
**Assistant Professor, Civil Engineering**

*The Feasibility Study of Using Microwave Emissivity in Detecting Freeze and Thaw States*

This study aims to examine the potential use of microwave emissivity (in lieu of brightness temperatures observations) in freeze/thaw prediction studies. Monitoring freeze-thaw transitions in high latitude regions are critical to enhancing our knowledge about the prediction of biogeochemical transitions, carbon dynamics, climate change, and impacts on boreal-arctic ecosystems. Current, freeze/thaw products mainly use direct measurements of microwave brightness temperatures.

Since land surface emissivity, which will not be affected by temperature and atmosphere interference, depends primarily on the surface characteristics, it would contain valuable information about the surface, especially regarding freeze and thaw states. The surface characteristics in terms of microwave emission changes whenever water undergoes phase changes at constant temperature. Transition between freeze and thaw states depends on the amount of heat energy the surface receives or releases and on the corresponding change in seasonal and diurnal temperature. Emissivity estimates from various microwave sensors (such as SSM/I, AMSR2, WindSat) on board available satellites can help to construct diurnal estimates in order to

accurately predicting the exact time of the freeze-thaw transition for each land cover type and region.

The diurnal cycle of the microwave brightness temperature will be constructed over the globe for different frequencies/polarizations using a multi-sensor / multi-platform data fusion. Emissivities are retrieved and freeze/ thaw state investigations is performed by examining the different thresholds on emissivity estimates that may define these states. The results reveal that microwave emissivity potentially can provide a better understanding about freeze/thaw states since they are not affected by temperature and atmosphere and represent the state of the surface in terms of moisture and their states. Moreover, the data fusion helps to provide more accurate timely estimates of the surface state especially in transition season. Results of this study improve the temporal frequency and the accuracy of the estimates which are necessary for many climate, environmental and hydrological studies.

**Linda Paradiso MSN, RN, NEA-BC**  
**Assistant Professor, Nursing**

Safety observation monitoring in inpatient settings is not one size fits all. Best practices are trauma informed and recovery oriented. Why monitor a paranoid patient at arm's length, check someone with a sexual trauma history repeatedly in the middle of the night and count respirations more than the medical units? The prevalence of incidents occurring while patients are monitored is frequent and fraught with error. Studies have identified that careful assessment can aid in the prediction and prevention of incidents.

Risks requiring increased observation monitoring are identified as aggression, suicide, self-harm, sexual predation, sexual victimization, elopement, disorganization, and medical conditions. The RN carefully assesses each patient using evidence based risk assessments. A Recovery Plan is developed in collaboration with the patient to identify triggers, preferred interventions, and self-calming coping strategies for each patient. Nursing safety tool kits can be individualized and provide ancillary staff with interventions targeted to the specific risks and coping strategies for each patient. For example, a patient with a risk for aggression is monitored from a 10 foot boundary between the patient and the community and can self-isolate when needed to decrease stimulation. Failure to follow observation policy identified that frequent safety observation rounds creates "alarm fatigue" in staff. In collaboration with physicians and other team member's careful assessments can actually reduce the frequency of these rounds. Monitoring is determined based upon the patient's assessment, trauma history, and point of recovery in their illness. Interventions target the specific risks of the patient creating improved clinical outcomes and patient and staff satisfaction. Additional benefit is fiscal savings through reducing one to one observation.

**Susan Phillip**  
**Associate Professor, Hospitality Management**

The purpose of this study was to evaluate how students in the hospitality management department at New York City College of Technology, of the City University of New York (CUNY), rated their preparedness for entry into the hospitality industry before and after taking a

disciplined-based career development course (HMGT 2308). Using the Career Decision Self-Efficacy Scale-Short Form (CDSE-SF) developed by Betz and Taylor (1983), five competencies – accurate self-appraisal, gathering occupational information, goals selection, making plans for the future and problem solving and their subscales – were surveyed in 58 students over two semesters. The results of the investigation revealed an increase in students' perception of their preparedness for a career in the Hospitality Industry after completing a career development course. Implications for students, educators and the hospitality industry are discussed.

**Jonas Reitz, PhD**

**Associate Professor, Mathematics**

*Building Universes: Independence Phenomena from Geometry to Set Theory*

In this talk I will discuss the phenomenon of independence in set theory and its natural connection to a pluralistic view, drawing examples from a parallel development in geometry. The widely accepted orthodox view of set theory is that there is an ultimate universe of sets  $V$ , and it is in this universe that mathematics takes place. The underlying theory of this universe is given by the Zermelo-Fraenkel axioms together with the Axiom of Choice, the ZFC axioms. Much of the work in set theory over the past century, exploring the power and limitations of ZFC, could be framed in terms of “learning the truth about  $V$ ”. It has become apparent, however, that the phenomenon of independence - those questions left unresolved by ZFC - holds a central place in the investigation. Much as Euclidean and non-Euclidean geometries disagree about fundamental geometrical questions, such as the parallel postulate, so do different set theories disagree about fundamental set-theoretic questions, such as the continuum hypothesis and many others. In practice, independence proofs work by building models that exhibit different properties. In set theory we build universes, and the result of many years of independence proofs is a profusion of universes exhibiting a wide variety of characteristics – a multiverse of set theories. I will conclude with a brief introduction to set-theoretic geology, the investigation within a single universe of an interesting local neighborhood of the set-theoretic multiverse.

**David Sánchez Jiménez, PhD**

**Assistant Professor, Humanities**

**Estudio transcultural en el contexto académico de máster: variación en las funciones retóricas de la cita utilizada por estudiantes universitarios estadounidenses y españoles**  
*8th International Workshop on Spanish Sociolinguistics, 2016*

Spanish in the United States spoken by native and non-native Spanish speakers

This research derives from the interest in learning the cultural differences in citation practices of native Spanish (Ee) and American writers of English (Ai) in the academic genre of Master's thesis from a discursive and rhetorical perspective. Citation is important for the writer not only to share his knowledge on a specific topic of his discipline to the scientific community, but also to give his point of view on the sources consulted (Ivanič, 1998; Ivanič y Camps, 2001; Bazerman,

2003; Thompson, 2005; Charles, 2006; Hyland, 2005, 2011; Castelló et alii, 2011; Gil-Salom y Soler-Monreal, 2014).

Accordingly, the rhetorical functions of citations of sixteen (16) Masters theses written in Spanish by eight (8) Spanish and eight (8) American postgraduates were analyzed. A quantitative and qualitative methodology was used to study this phenomenon based on the computerized textual analysis of the rhetorical function of citations arranged in typological classification that modified the outline proposed by Petrić in his 2007 article.

The results obtained from the research showed that the different cultural conventions in the thesis writing indicate that when compared with native Spanish writers, the American writers of English use the highest number of citations and write a relatively longer Introduction and Conclusion parts. Thus, we observe in these parts a greater tendency in contextualizing research in academic texts written in English with the aim of promoting the study within the scientific community. On the other hand, the American informants used a more dialogic style in their writings than the Spanish in using citations. Therefore, a distinct cultural conceptualization of the citations creates a different rhetorical structure of how their theses were elaborated. These differences found in both groups can find a proper didactic application in academic writing courses intended for the preparation of written academic work. It is therefore recommended that this research take on a wider study of other cultures, genre and disciplines.

**Elizabeth Schaible**

*Associate Professor*

*Food Studies*

*Hospitality Management*

**Palate and Place ~ The Intersection of Food and Design, Then and Now**

*ASFS/AFHVS/CAFS Annual Conference 2016 (Association for the Study of Food and Society)*

*Scarborough Fare: Global Foodways and Local Foods in a Transnational City*

**ABSTRACT**

In 1938, my father won a yearlong fellowship to study modern architecture in Europe. The Booth Traveling Fellowship in Architecture has been awarded annually since 1924 in competition by his alma mater, the University of Michigan. Armed with a stipend, camera and journal books, he documented his travels highlighted by stays in several European cities including Paris, Florence, Vienna, Oslo, Helsinki and Berlin. He studied designs both classical and modern and relaxed in cafes savoring the local cuisines. He kept copious records of his encounters in his journals and his photographs are meticulously labeled.

From a historical perspective and at two points in time, 1938 and today, this project examines how the iconic foods and the surrounding architecture have transformed in selected European cities. More specifically, the research explores: what are the iconic foods/beverages and the establishments in 1938 and today; how do people relate to the food, space and design, then and now; how have the food and designs changed between the two fixed points in time?

In April 2015, I traveled to Paris to conduct field research using the journal entries and guidebooks from the 1930's. Menus from the types of 1930's restaurants that my father mentions in the journals have been compared to those of today. The architectural spaces of the food establishments of then and now are analyzed.

**Elizabeth Schaible**

*Associate Professor*

*Food Studies*

*Hospitality Management*

**Foodies Venture Afield: Culinary Tourism in Aspiring International Food Destinations**

*ASFS/AFHVS/CAFS Annual Conference 2016 ((Association for the Study of Food and Society) Scarborough Fare: Global Foodways and Local Foods in a Transnational City*

**ABSTRACT**

Culinary tourism is increasingly seen not only as a way of marketing tourism destinations, but also as a tool for reinforcing local foodways, sustainable agriculture, and economic development. This approach has been used not only by commonly recognized food destinations such as Spain, Thailand or Louisiana but also by less obvious culinary regions such as Ireland and Scandinavia. There are many other countries with strong local culinary traditions that would benefit from an increase in visibility. This roundtable will examine three diverse countries, currently not on most culinary tourism maps, each destination at a different stage of recognizing its culinary tourism potential. Iceland, despite its isolation and limited resources, is emerging as a gastronomic destination. Uruguay, though enormously rich in food resources, is mostly unrecognized by food travelers. Haiti, though culturally rich and nearby the North American market, has struggled to attract tourism. The roundtable will examine potential and best practices for regional and local development through culinary tourism.

**Jennifer Sears, MFA**

Assistant Professor, English

**EMERSON'S EGYPT**

American Literature Association Annual Conference, 2016

Ralph Waldo Emerson Society Panel Theme: Global Emersons

In January 1873, Ralph Waldo Emerson and his oldest daughter Ellen boarded the dahabeah *Aurora* and began a journey toward the island of Philae, the ancient temple of Isis on the Egyptian Nile. Emerson's physical deterioration at this time is well documented. After enduring the devastating fire in his beloved Concord home, his memory had noticeably weakened. En route to Egypt through Europe, his correspondence recycles his own phrases excusing his "solitary and silent ways," and then on the Nile, his lifetime of letters and journal entries stop. "The air of Egypt is full of lotus," he later explains, "& I resent any breaking of the dream."

I aim to convey a clearer sense of the "dream" that enchanted Emerson during the heightened time of American Orientalist travel in Egypt. I'll draw on diverse materials including letters and accounts from both Emersons and other Nile travelers, and Emerson's early confidante Samuel Gray Ward, who had known Emerson at the height of his powers and who Emerson desperately wished to meet at Philae.

I'll also examine Emerson's disorientated emotional state before and after the voyage and, lastly, consider texts that convey Emerson's lifelong relationship to the subject of Egypt as literary "dream," from his "Egyptian darkness," the name he gave to the formative melancholy he endured after his first wife's death in 1831, to his 1870 Introduction to Plutarch's *Moralia*, which includes the ancient myth of Isis and Osiris.

**Ashwin Satyanarayana, PhD**

*Assistant Professor*

*Computer Systems Technology*

**Ensemble Noise Filtering for Streaming Data Using Poisson Bootstrap Model Filtering**

*13th International Conference on Information Technology- New Generations April 4-6, 2016*

*Theme: Technologies pertaining to digital information and communications*

ABSTRACT:

Ensemble filtering techniques filter noisy instances by combining the predictions of multiple base models, each of which is learned using a traditional algorithm. However, in the last decade, due to the massive increase in the amount of online streaming data, ensemble filtering methods, which largely operate in batch mode and requires multiple passes over the data, cause time and storage complexities. In this paper, we present an ensemble bootstrap model filtering technique with multiple inductive learning algorithms on several small Poisson bootstrapped samples of online data to filter noisy instances. We analyze three prior filtering techniques using Bayesian computational analysis to understand the underlying distribution of the model space. We implement our and other prior filtering approaches and show that our approach is more accurate than other prior filtering methods.

**Fangyang Shen, PhD**

*Assistant Professor*

*Computer Technology*

*Computer Systems Technology*

## **Experimental Evaluations of MapReduce in Biomedical Text Mining**

*14th International Conference on Information Technology, April 2016*

### **ABSTRACT**

As a parallel and distributed programming paradigm, MapReduce has been widely applied to data-intensive applications in different domains because of its simplicity and fault-tolerance. However, its performance in biomedical text mining has not been extensively studied. In this paper, we demonstrate our development of two biomedical text mining applications: biomedical literature search (BLS) and biomedical association mining (BAM). While the former requires less computations, the latter is more computationally intensive. Experimental studies were conducted using Amazon Elastic MapReduce (EMR) with an input of 33,960 biomedical articles from TREC (Text REtrieval Conference) 2006 Genomics Track. Our experiment results indicated that both applications' scalabilities were not linear in term of the number of computing nodes. When the number of nodes was increased, more data became non-local to map tasks and incurred more network data accesses. Thus the time cost to read the data does not decrease proportionally, as the number of nodes increases. BAM achieved better scalability than BLS since BLS performed less computations and were primarily dominated by overheads such as JVM startup, scheduling, disk I/O, etc. These observations imply that existing MapReduce framework is not suitable for on-line systems such as literature search that needs quick response.

**Maura A. Smale, Ph.D.**

**Associate Professor, Library**

*Lifelong Learning for Librarians: Building Expertise in Research Methods*

As higher educational institutions shift toward more evidence-based or analytically-driven frameworks for understanding the activities of their students and faculty, libraries and librarians are increasingly asked to provide data and analysis to articulate their contributions to their parent institutions, to justify library budgets and services, and to support other institutional planning and initiatives. Library systems and assessment activities often generate massive amounts of data, especially about the behavior of library users. The collection and use of these data raise complicated issues of privacy, ethics, and social justice, which are not unique to libraries, but in which libraries are key institutional actors. It is therefore crucial to consider how education and training in quantitative and qualitative research methods can help situate and critique policies around institutional data collection and use.

Librarians tasked with creating and executing policies around data collection and use deserve appropriate education and training. In order to be fully included in institutional processes, librarians regularly need to conduct and analyze sophisticated social science research for which they often have limited education, training, or experience. The ability to use, engage with, interpret, and critique a variety of research methods is a key skill for librarians, and one that many library professionals consider insufficiently developed. While education in research methods may begin during the library and information science (LIS) degree program, building experience and expertise in research methods must continue throughout librarians' careers.

Research knowledge and skills are best learned by active involvement in the research process. Providing research mentorship programs is one way for individuals to develop the expertise and confidence to undertake individual projects. As a discipline, we need to create and support initiatives supporting long-term professional development and mentorship programs for librarians at various points in their careers and at increasingly sophisticated skill levels.

**Ryoya Terao**  
**Assistant Professor, Entertainment Technology**

Students in technologically focused degree programs or colleges may not consider content a priority. Yet, content frequently informs technological choices and should therefore be an element, even in technology curricula. This panel presents methods of introducing technology students to the important interplay between content and technology and guiding them through improved content development in class projects (including behind-the-scenes looks at students producing films on poetry, plays, educational medical videos, and a nationwide environmental project).

**Johann Thiel**  
**Assistant Professor Mathematics, Department of Mathematics**

Orphans in Forests of Linear Fractional Transformations Society for Industrial and Applied Mathematics Conference on Discrete Mathematics 2016 Discrete mathematics  
Nathanson showed that the set of positive linear fractional transformations (PLFTs) can be partitioned into an infinite forest of PLFT Calkin-Wilf-trees. The roots of these trees are called orphans. In this talk, we will provide a combinatorial formula for the number of orphan PLFTs (with fixed determinant) and show how these trees are connected to the original Calkin-Wilf tree. This is joint work with Sandie Han, Ariane M. Masuda, and Satyanand Singh.

**Junior Tidal**  
**Associate Professor, Library**

*American Libraries Association Video Roundtable Notable Videos Committee*

This past January, I attended the American Libraries Association (ALA) Midwinter 2016 conference to continue my last year as a member of the ALA Video Roundtable Notable Videos Committee. Over the 2015 calendar year, I watched 48 documentaries hand-picked by video librarians across the country. The committee was comprised of 8 (including myself) academic and public librarians. We discussed the values of each documentary and how they could be useful to others. After vetting over an 8 hour closed meeting, we forged a list of 15 films. The list of films is shared nationally with other media librarians. Many of the films focused on the darker side of humanity, examining everything from war, genocide, and environmental disasters. The full list of notable documentaries can be found here: <http://www.ala.org/news/press-releases/2016/01/2016-list-notable-videos-adults-released> .

*Website Working Group & Scholarship Committee*  
*code4Lib National 2016 Conference*

This past March, I attended the code4Lib 2016 Conference to complete my committee work on two national committees. The first committee, the Website Working Group, was in charge of developing the conference website - <http://2016.code4lib.org/> . This site not only represents the conference, but informs attendees with schedules, events, and speaker information. I assisted in evaluating the user experience of the site, ensuring that the site followed ADA guidelines. I also helped code the initial “Speakers” page. The second committee, the Scholarship Committee, vetted diversity-based scholarship applications to the conference. I joined the committee with the experience of being a previous recipient for the scholarship. While attending the conference, I was able to have lunch with many of the winners and committee. This provided me the opportunity to network and connect with other professionals all over the world.

**Shauna Vey**  
**Associate Professor, Humanities**

*Nineteenth-Century Melodrama's Child Heroines: A Fictional Ideal Set in Stone*

Emerging notions of idealized childhood fueled the popularity of mid-nineteenth century melodrama. Its angelic heroines spread goodness on all who came within their blessed sphere. Scholars have noted how the child actors playing these roles were often credited with the spiritual purity and power of the characters they portrayed. One such child actress was Little Mary Marsh, who performed Little Eva in Uncle Tom's Cabin, among other such archetypal roles. In contemporaneous writing, her off-stage personality was described in the sentimental language of melodrama. After her tragic on-stage death in 1859, she was buried in Rose Hill cemetery. In this paper I show how Marsh's persona and subsequent commemoration was woven from the complementary tenets of melodrama, childhood, and the rural cemetery movement. This case study illustrates the tenacious potency of the idealized child—on stage, in life, and after death.

*Association for Theatre in Higher Education (ATHE)*

My primary goal at the 2015 ATHE conference was promoting my book, forthcoming this fall from Southern Illinois University Press.

ATHE is the largest organization for theatre faculty in North America; it is comprised of thirty focus groups and several affiliated organizations. The American Theatre & Drama Society is a specialized, incorporated organization that holds its annual meeting in conjunction with ATHE.

At the annual meetings of both the American Theatre & Drama Society and the Theatre History Focus Group, I announced my book and distributed advertising/discount coupons from my

publisher (att.). I made similar announcements at an alumni gathering and in various panel sessions (where appropriate). Over the course of the conference I distributed over one hundred discount coupons for the book. I also met with the editor of the *Journal of American Theatre & Drama* about having my book reviewed by the journal.

I attended panels that enhanced my knowledge of ensemble acting exercises, musical theatre history (and the teaching of it), contemporary Montreal performance art, 18<sup>th</sup>- and 19<sup>th</sup>-century Irish theatre, and research on documentation of transferable skills learned in theatre classes.

I met a scholar with whom I share many interests and whose work I had read (and who had read mine), and we discussed a future collaboration. This was valuable networking of the sort that is only possible face to face.

**Yu Wang, PhD**  
**Assistant Professor, Computer Engineering**

*Performance Study of RASO Algorithm Beyond 4G*

Self-optimization for random access procedure in SONS has a profound impact on user equipment experience and network performance in 3G/4G. However, the process of designing self-optimization towards a 5G system is a difficult challenge. In this paper, we proposed a multi-objective algorithm of random access self-optimization (RASO) in terms of auto-adjustment and configuration, which includes physical random access channel parameter, transmission power parameter, and backoff parameter jointly auto-adapted with respect to changes in the network. Our simulation demonstrated that a combination of these control parameters and their auto-adjustment directly improves the access probability and access delay at high load, compared to using a single control parameter. Such combination also enhances the reception of random access requests, thus producing better quality of service. Simulation results are thus presented to illustrate the algorithm's effectiveness.

**Daniel Wong**  
**Associate Professor, Communication Design**

*Communication Design Scholarship: Opportunities and Approaches*

Design programs in American colleges and universities are adding design research, contemporary practice, and publishing that demonstrates rigor and impact factor to the requirements of design educators' scholarly activities. With these changing requirements, the need for reputable and established modes of dissemination has reached a critical mass.

From practice to theory, this panel examines research formats, forms of investigation, representation of research, venues, organizations, and publishing opportunities available to Communication Design educators and researchers. It will discuss contemporary design research approaches and formats, and note various organizations and publishing outlets accessible to educators, researchers, and practitioners of design. In conclusion, the panel will explore where practice fits within academia.

**Gordon Xu, MLIS**  
**Assistant Professor, Library**

*Uncovering Email Notification Issue in Aleph: Contributing Factors and Solutions*

As a Systems & Information Technology Librarian and Coordinator of Library Systems, my major role is providing technical support for the smooth functioning of library systems, and ensuring library systems work in an efficient, user-friendly and integrated manner. I try to acquire the knowledge necessary for the effective support of technology in the library, and I am always open and willing to expand my personal knowledgebase with the goal of improving patron and staff interactions with technology. CUNY is a major library system customer of Ex Libris. Ex Libris Users of North America (ELUNA) aims to connect member institutions to a network of other users of Ex Libris products.

Members share best practices with peer institutions and support each other through meetings, networking, and hosted email discussion lists. To learn the best practices and keep current for Ex Libris products, I've been attending the ELUNA annual conference since 2009.

I also presented my findings for the Integrated Library System Aleph at the ELUNA 2016 Conference. My presentation topic is the email notification issue, which had existed for over a year prior to my joining the library. The issue was very complicated and many contributing factors could cause it. After numerous testing, the mail server was identified as the real culprit, and the issue was solved. Even the Ex Libris Knowledge Center has no documentation regarding this issue. After my presentation, Ex Libris told me they would include my finding in their Knowledge Base.

**Ozlem Yasar, Ph.D.**  
*Assistant Professor, Mechanical Engineering*

*Fabrication of Lindenmayer System-Based Designed Engineered Scaffolds Using UV-Maskless Photolithography*

In the field of tissue engineering, design and fabrication of precisely and spatially patterned, highly porous scaffolds/matrixes are required to guide overall shape of tissue growth and replacement. Although Rapid Prototyping fabrication techniques have been used to fabricate the scaffolds with desired design characteristics, controlling the interior architecture of the scaffolds

has been a challenge due to CAD constrains. Moreover, thick engineered tissue scaffolds show inadequate success due to the limited diffusion of oxygen and nutrients to the interior part of the scaffolds. These limitations lead to improper tissue regeneration. In this work, in order to overcome these design and fabrication limitations, research has been expanded to generation of scaffolds which have inbuilt micro and nanoscale fluidic channels. Branching channels serve as material delivery paths to provide oxygen and nutrients for the cells. These channels are designed and controlled with Lindenmayer Systems (L-Systems) which is an influential way to create the complex branching networks by rewriting process. In this research, through the computational modeling process, to control the thickness, length, number and the position of the channels/branches, main attributes of L-Systems algorithms are characterized and effects of algorithm parameters are investigated. After the L-System based branching design is completed, 3D tissue scaffolds were fabricated by “UV-Maskless Photolithography”. In this fabrication technique, Polyethylene (glycol) Diacrylate (PEGDA), which is biodegradable and biocompatible polymer, was used as a fabrication material. Our results show that L-System parameters can be successfully controlled to design of 3D tissue engineered scaffolds. Our fabrication results also show that L-System based designed scaffolds with internal branch structures can be fabricated layer-by-layer fashion by Maskless Photolithography. This technology can be easily applied to engineering living systems.

### *Medical Waste of Light-Based Scaffold Fabrication Materials and Their Environmental Impacts*

Medical facilities has brought the importance of the medical waste management to the consideration as the infectious diseases increase. To reduce the contamination and infection, medical waste must be treated carefully. Tissue Engineering that aims to generate tissues in the laboratory environment can be used as an alternative way to the organ transplantation as organ transplantation is a complicated and infectious process. In tissue engineering, success can be achieved only if man-made building blocks called scaffolds are fabricated precisely. Scaffolds help cells to grow in 3D and they can be fabricated by using “heat”, “light” or “molds”. These three techniques have their own environmental impacts in terms of toxicity, energy consumption and cost. Most environmental friendly and cost efficient scaffold fabrication techniques among these methods are the light-based ones. In this paper, materials that are used in light based fabrication techniques were investigated to reduce the medical waste generation. This preliminary research showcases the light based scaffold fabrication materials can be modified to reduce the medical waste generation.

**Zheng Zhu, PhD**  
**Assistant Professor, Humanities**

### *A Friend in Need is A Friend in Deed – Constructing a Communist Ally in China Daily*

This study analyzes *China Daily*, a state-run online newspaper's representation of African countries, and how the representation constructs the state's neo-imperialistic domination. The analysis demonstrates that *China Daily* glorified the state's domination of African countries as

saving the poor and weak friends. *China Daily* employed the Communist ideal of international equality to justify the state's neo-imperialistic domination of African countries.