2018 Southwest Texas Asian Symposium

November 2th, 2018
Texas A&M University
Corpus Christi

Hosted by
UTRGV Asian Studies Minor
&
Texas Coastal Band of Korean American Scientists and Engineers Association

TEXAS A&M UNIVERSITY CORPUS CHRISTI

Welcome to the 2nd Southwestern Texas Asian Symposium (SWTAS) at Texas A&M University, Corpus Christi on November 2, 2018. This symposium will be co-organized by the Asian Studies Minor program at UTRGV (www.utrgv.edu/asian-studies) and Texas Coastal Bend of Korean Scientists and Engineering Association (https://tcb.ksea.org/).

The Southwestern Texas Asian Symposium is a forum for scholars, teachers, practitioners, and students across disciplines to explore current issues of Asian Studies and or Studies by Asian, fostering the community of Asian scholars in various research areas. We promote collaboration for diversified studies with convergence and fusion across the disciplines. The Southwestern Texas Asian Symposium promotes and serves for diversity and globalization in higher education in Texas.

Symposium Theme: Advancing diversity

Strands:

1. Arts, Humanities, Languages, and Cultural Studies
2. Business and International Affairs
3. Education
4. Health Sciences
5. STEM (Science, Technology, Engineering & Mathematics),
6. Social Sciences
7. Others

Date & Time:
November 2, 2018
9:00AM – 5:00PM

Venue:
Texas A&M University – Corpus Christi
6300 Ocean Dr. Corpus Christi, TX. 76412

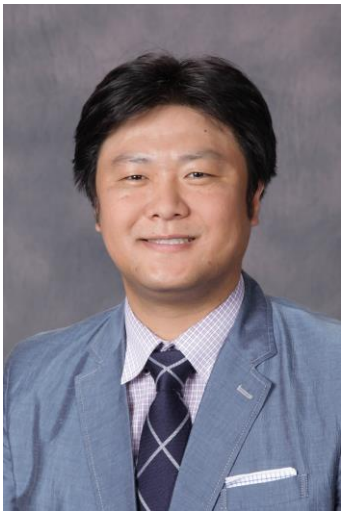
Contact:
Symposium chair:
Dr. Dugan Um, TAMUCC, (Dugan.Um@tamucc.edu)

Program committee chairs:
Dr. Minhee Eom, UTRGV (minhee.eom@utrgv.edu)
Dr. Taesic Kim, TAMUK, (taesic.kim@tamuk.edu)
Dr. Hyung Kim, UTRGV, (hyung.kim@utrgv.edu)

Keynote speech

Keynote Speech:

Title: Links between Robotics and Biomechanics for Gait and Balance Rehabilitation



Abstract

Human movement is extremely robust whereas robotic movement is clumsy. For example, most healthy people take bipedal walking for granted even though it is one of the most complicated motor behaviors. Bipedal walking is one of the most complicated motor behaviors because the most advanced technologies can barely replicate human walking with minimum robustness. Robust walking with perturbations is one of the most important bipedal walking characteristics which only humans can currently perform. In the near future, there will be increased needs for humanoid robots (e.g., rescue robots, service robots at home, and cooperative robots in factories), lower-limb exoskeletons, lower-limb prostheses, and orthoses. These robots are intended to interact with humans by serving the needs of human operators. Thus, lack of robustness against perturbations (e.g., push, wet floors, unstable floor at home, grocery stores, factories) may put human operators in danger. Even without human operators, autonomous bipedal rescue robots should be robust to perturbations for successful rescue tasks. This robustness cannot be achieved by usual methods of output tracking and virtual constraints , zero moment point methods, or direct trajectory optimization. In this talk, I will present in-progress projects that may resolve the fundamental issues with these concerns. I will show how bio/neuromechanical understanding of human walking can be related to robotic walking.

Biography

Dr. Pilwon Hur received the B.S. degree in mechanical engineering from Hanyang University, Seoul, Korea, in 2004, the M.S. degree in mechanical engineering from the Korea Advanced Institute of Science and Technology, Daejeon, South Korea, in 2006, and the M.S. degree in mathematics and the Ph.D. degree in mechanical engineering from the University of Illinois at Urbana-Champaign, USA, in 2010. He also held a postdoctoral fellowship in the Center for Ergonomics at the University of Wisconsin-Milwaukee. He is an Assistant Professor in the Department of Mechanical Engineering at Texas A&M University, College Station, TX. He directs the Human Rehabilitation (HUR) Group and is interested in whole body movement, specifically, gait, balance, slip recovery, and hand movement. To understand how human plans and controls the movements, he focuses on research in motor control, neuromechanics, and biomechanics of these movements. Based on the findings, he develops rehabilitation programs for neurologically-impaired patients using technologies from rehabilitation robotics, virtual reality, and sensory augmentation.

2018 Southwest Texas Asian Symposium Program

Time & Location	Event
8:30-9:00 EN 201	Registration A $20 registration fee is payable at the time of registration for conference materials and food & beverage. (Cash or personal check accepted)
9:00-9:30 EN 201	Opening ~~Dr. Lea-Der Chen~~, Associate Dean of College of Science and Engineering
9:30-10:50 EN 201	**Keynote Speech:** Links between Robotics and Biomechanics for Gait and Balance Rehabilitation Dr. Pilwon Hur
11:00-12:00 EN 201/ OCNR 135	**Concurrent Sessions**
12:00-13:00 EN 201	Lunch Break
13:00-16:40 EN 201/ EN 118	**Concurrent Sessions**
16:40-17:00 EN 201	Closing & Award Ceremony

The 2nd Southwest Texas Asian Symposium
Friday November 2, 2018
Texas A & M University, Corpus Christi

Time	Concurrent Sessions	
11:00-12:00	**Session 1: Social and Psychological Issues in Diverse Society** Room: EN 201 ***Social Isolation among Older Adults: Group-based Approach as An Alternative:*** Dr. Susheelabai Srinivasa, Dr. Sudershan Pasupuleti, & Dr. Lin Jiang, The University of Texas Rio Grande Valley ***Perceived Discrimination, Family and Spousal Relationship, and Psychological Distress Among Asian Americans: Testing Mediation and Moderating Effects:*** Dr. Soyoung Kwon, Texas A&M University ***Issues Associated with Asian American Counseling in the School:*** Dr. Yih-Jiun Shen, The University of Texas Rio Grande Valley	**Session 2: Interdisciplinary studies in STEM** Room: OCNR 135 ***Sleep Monitoring Systems for a Senior Population: Issues, Research, and Future:*** Dr. Jangwoon Park, Texas A&M University-Corpus Christi. ***Survey Instrument Development of Trust in Automation Using Network Analytic Approach:*** Dr. Byung Cheol Lee, Texas A&M University-Corpus Christi ***Classifying fundamental locomotor skills - a machine learning approach:*** Dr. Toyin Ajisafe & Dr. Dugan Um, Texas A&M University-Corpus Christi

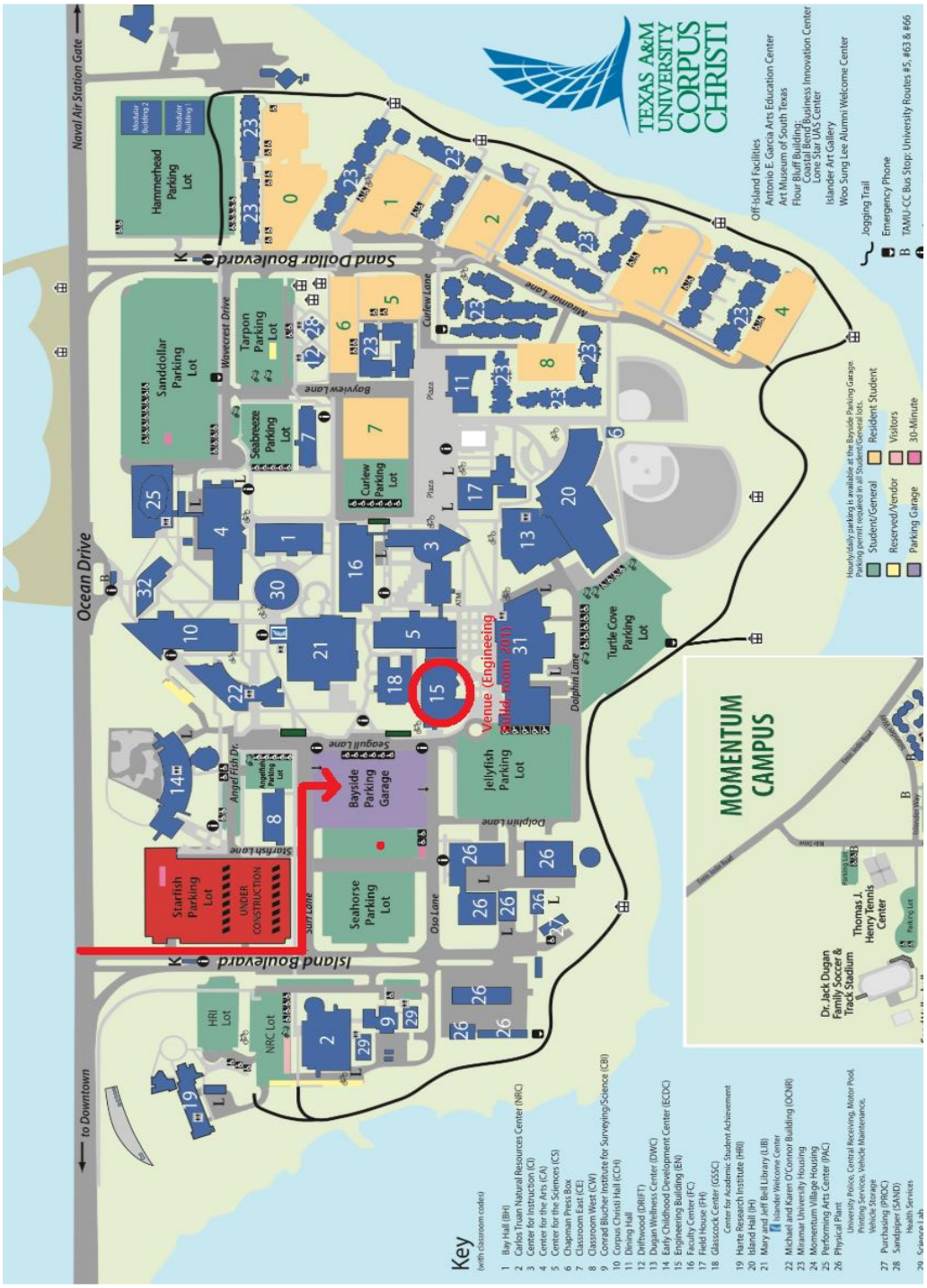
13:00-14:00	**Session 3: Language and education in multilingual contexts** Room: EN 201 ***Two Languages in One Mind: Eye Movements Reveal Psycholinguistic Units in Bilingual Spoken Word Recognition:*** Dr. Yu-Cheng Lin, The University of Texas Rio Grande Valley ***Perceived Challenges of Learning Korean as a Foreign Language:*** Dr. Minhee Eom, The University of Texas Rio Grande Valley ***Developing Instruments for Understanding HSI students' HIP perspectives and experiences:*** Dr. Ming-Tsan Pierre Lu, Dr. Maria Diaz, & Dr. Johanna Esquivel, The University of Texas Rio Grande Valley	**Session 4: Agriculture/Transportation** Room: EN 118 ***Soil Management Options to Reduce Runoff in Urban Compacted Land:*** Dr. James Jihoon Kang, Jungseok Ho, Adam Flores, Darla Ortega, & Aaron Garza, The University Texas Rio Grande Valley ***Development UAS-based Yield Estimation System for Cotton in South Texas:*** Dr. Sungchan Oh, Texas A&M University-Corpus Christi ***A Heuristic for Large Scale Multiple Vehicle Routing Problem:*** Shivani Nilkanth Patil & Dr. Joon-Yeoul Oh, Texas A&M University–Kingsville

14:10-15:10	**Session 5: Dynamics of Asian-American contacts** Room: EN 201 ***Asian Professionals' Experiences and Perspectives of Living and Working in a Borderland Region:*** Taking Professors at an HSI as an Example: Dr. Johanna Esquivel & Dr. Mingtsan Pierre Lu, The University of Texas Rio Grande Valley ***Anti-Chinese Violence in Arizona Territory, 1900-1910:*** Dr. Brent M. S. Campney, The University of Texas Rio Grande Valley ***Exploring the Associations Among Criminal Propensity, Criminal Behaviors and Environmental Attitudes:*** Dr. Yongsok Kim, Texas A&M University–Kingsville	**Session 6: Precision Engineering** Room: EN 118 ***Thin Film Electrocorticography (ECoG) Microelectrodes for Rodent Models:*** Paul A Lenz, Gildardo Guzman, Gage E Benham, & Dr. Yoonsu Choi, The University Texas Rio Grande Valley ***Analysis of Flash in Injection Molding Using Flow Simulation and Design of Experiments:*** Dr. Claudia Lizette Lopez, Dr. Kyehwan Lee, The University of Texas Rio Grande Valley, & Dr. Young Gil Park, Florida Polytechnic University ***Characterization of a Silicon Microfluidic Probe for Generating a Hydrodynamically-Confined Microflow:*** Dr. Choongbae Park, Texas A&M University–Kingsville

15:20-16:40	**Session 7: Striving for educational success** Room: EN 201 ***Task-Based Learning as Framework for Pre-service Elementary Teachers' Learning in Fraction Operations:*** Dr. JenqJong Tsay, The University of Texas Rio Grande Valley ***High School Teachers' Attitudes toward Statistics in South Korea:*** Dr. Hyung Won Kim, Xiaohui Wang, The University of Texas Rio Grande Valley, & Bongju Lee, Kyungpook National University ***Lessons Learned from Educational Positive Psychology Initiatives at an HIS:*** Dr. Mingstan Pierre Lu, The University of Texas Rio Grande Valley ***Producing customized lecture note for Flipped Course Model for Geometry:*** Dr. Taeil Yi, The University of Texas Rio Grande Valley	**Session 8: Thriving in Health Science** Room: EN 118 ***Reactivation of the SALL2 Tumor Suppressor Gene in Human Ovarian Cancer Cells:*** Dr. Chang K. Sung, Texas A&M University-Kingsville ***Age-associated changes of DNA repair activity in Human Brain:*** Dr. Haeyoung Kim, Sai Sree Sumitra Kalagara, Eduardo Guevara, Jessica Silhavy, & Christian Chap, Texas A&M University-Kingsville ***Developing a Community-based U-Wellness Park Program (CCUPP) Tailored to Individual Health Needs using an Innovative RFID/USN Technology with Exercise and Nutrition Management***: Dr. Kyoung Eun (Kelly) Lee, Texas A&M University, & Dr. Younghee Ro, Wellness IT Cooperation

Parking information

1. Please park at the Bayside parking garage (see the map).
2. Push the green button and take a ticket while you enter the garage.
3. Pay the bill when you leave at the billing machine. Billing machine is at the entrance next to the engineering building.
4. Insert the paid ticket at the exit gate of the garage.



Thank you for participating in the 2nd Southwest Texas Asian Symposium. We will see you at Texas A&M University-Kingsville in 2019.