

GOLDEN ACADEMY

Message from the organizers

Dear Colleagues and Friends,

Asia Pacific Society for Computing and Information Technology 2018 Annual Meeting (APSCIT 2018 Annual Meeting) will be held in Hokkaido, Japan during July 19-22 2018.

APSCIT 2018 Annual Meeting intends to provide a platform for the exchange and networking between top scientists, emerging young researchers, and students across a wide spectrum of computer science and informatics.

We would like to invite you to participate in APSCIT 2018 Annual Meeting. Your active participation is the key to the success of this conference.



Yours Sincerely,

APSCIT 2018 Annual Meeting Committee

Asia Pacific Society for Computing and Information Technology (APSCIT)

www.apscit.org

GOLDEN ACADEMY

Conference organizing committee

CONFERENCE CHAIRS

Prof. Hirooki AOKI (Chitose Institute of Science and Technology)

Prof. Shih-Hao CHANG (Tamkang University)

Prof. Yasushi KAMBAYASHI (Nippon Institute of Technology)

Prof. Hiroko KANO (National University Corporation Yamagata University)

Prof. Hee-Je KIM (Pusan National University)

Prof. Jae Dong LEE (Dankook University)

Prof. Koichi SHIMIZU (Waseda University)

Prof. Wen-Tsai SUNG (National Chin-Yi University of Technology)

Prof. Ikumi SUZUKI (Yamagata University)

CONFERENCE PROGRAM DIRECTORS

Dr. Yingxue SONG (APSCIT)

CONFERENCE SECRETARIAT

Ms. Yangjun HU (APSCIT)

Ms. Yaru WU (APSCIT)

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Conference topics

1. *Theory, Algorithms, Programming: No. 207 (5, 13, 29)*
2. *Database, Cloud Computing, Data Mining, Big Data: No. 207 (22-23), No. 202 (25)*
3. *Communications, Networking, Security, and Internet of Things: No. 207 (6-12, 27-28), No. 204 (14), No. 202 (29)*
4. *Multimedia, Image Processing and Recognition (Virtual Reality): No. 201 (3-5), No. 204 (16-18), No.207 (21, 24)*
5. *High Performance Computing and Intelligent Systems (AI, Robotics): No. 207 (1-4, 19-20), No. 202 (26-28)*
6. *Software Engineering and Applications: No. 201 (1), No. 207 (25-26)*
7. *Electronics (Analog/Digital Circuits, Signal Processing, System Architectures): No. 201 (2, 6-13), No. 204 (15)*

	THU, 7/19	FRI, 7/20	SAT, 7/21	SUN, 7/22
9:00 – 10:20	Pre-session technical and discussion forums on international collaboration	Oral Presentation		
10:20 – 10:30		Coffee & Tea Break		
10:30 – 12:00		Oral Presentation		
12:10 – 13:00		Lunch Break		Optional Excursion
13:10 – 14:40		Oral Presentation		
14:40 – 14:50		Coffee & Tea Break		
14:50 – 17:15		Oral Presentation		
17:15 – 18:30	Conference Registration		Poster Session	
19:00 – 20:30	Conference Reception		Banquet(Japanese convivial gathering)	

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Presentation List (No. 201 Meeting Room)

	THU, 7/19	FRI, 7/20	SAT, 7/21	SUN, 7/22
9:00 – 10:20	Pre-session technical and discussion forums on international collaboration	1. T. ISHIO 2. H.J. KIM		
10:20 – 10:30		Coffee & Tea Break		
10:30 – 12:00		3. T. NAMITA 4. N. KATO 5. D. LEE		
12:10 – 13:00		Lunch Break		Conference Excursion
13:10 – 14:40		6. C.W. LEE 7. K. ZEB 8. M.U. ALI		
14:40 – 14:50		Coffee & Tea Break		
14:50 – 17:15		9. D.G. PARK 10. N. BANDARI 11. S.F. LIANG 12. K.D. IKKURTHI 13. A. SUBRAMANIAN		
17:15 – 18:30	Conference Registration		Poster Session	
19:00 – 20:30	Conference Reception		Conference Banquet (Japanese Convivial Gathering)	

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Presentation List (No. 202 Meeting Room)

	THU, 7/19	FRI, 7/20	SAT, 7/21	SUN, 7/22
9:00 – 10:20	Pre-session technical and discussion forums on international collaboration			25. K. HAN 26. T.L. LIU
10:20 – 10:30		Coffee & Tea Break		
10:30 – 12:00				27. Y. HAGIWARA 28. A. HIZUKURI 29. Y. MIZUNO
12:10 – 13:00		Lunch Break		Conference Excursion
13:10 – 14:40				
14:40 – 14:50		Coffee & Tea Break		
14:50 – 17:15				
17:15 – 18:30	Conference Registration		Poster Session	
19:00 – 20:30	Conference Reception		Conference Banquet (Japanese Convivial Gathering)	

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Presentation List (No. 204 Meeting Room)

	THU, 7/19	FRI, 7/20	SAT, 7/21	SUN, 7/22
9:00 – 10:20	Pre-session technical and discussion forums on international collaboration		14. R.S. KO 15. H.G. CHO	
10:20 – 10:30		Coffee & Tea Break		
10:30 – 12:00			16. K. SHIMIZU 17. Y. KATO 18. M. KITAMA	
12:10 – 13:00		Lunch Break		Conference Excursion
13:10 – 14:40				
14:40 – 14:50		Coffee & Tea Break		
14:50 – 17:15				
17:15 – 18:30	Conference Registration		Poster Session	
19:00 – 20:30	Conference Reception		Conference Banquet (Japanese Convivial Gathering)	

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Presentation List (No. 207 Meeting Room)

	THU, 7/19	FRI, 7/20	SAT, 7/21	SUN, 7/22
9:00 – 10:20	Pre-session technical and discussion forums on international collaboration	1. W.T. SUNG 2. M.C. SU		25. E. PYSHKIN 26. N. YAMANAKA
10:20 – 10:30		Coffee & Tea Break		
10:30 – 12:00		3. S.J. HSIAO 4. C.Y. CHUNG 5. K. YI		27. Y. LEE 28. T. KURIMOTO 29. M. NISHIARA
12:10 – 13:00		Lunch Break		Conference Excursion
13:10 – 14:40		6. N. IKOMA 7. S. AKASHI 8. T. KUMAZAWA	19. C.S. LU 20. W.C. LAI 21. H. OHKI	
14:40 – 14:50		Coffee & Tea Break		
14:50 – 17:15		9. H. OHMURA 10. T. MATSUZAWA 11. H. YAMAGUCHI 12. J.J. LIN 13. J.W. HSIEH	22. K. NAKAJIMA 23. I. SUZUKI 24. T. MORIYAMA	
17:15 – 18:30	Conference Registration		Poster Session	
19:00 – 20:30	Conference Reception		Conference Banquet (Japanese Convivial Gathering)	

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Presentations for APSCIT 2018 Annual Meeting

FRIDAY 7/20

No. 201 Meeting Room

1. Software Ingredients: Detection of Third-Party Components in Software Release (T. ISHIO)
2. Future Trend of Solar Energy and ESS (Energy Storage System) (H.J. KIM)
3. Photoacoustic imaging for evaluating tissue characterization (T. NAMITA)
4. Differences in reaching movement between real space and virtual reality (N. KATO)
5. Geometric Approach for 3D Shape Analysis for Reconstruction and Recognition (D. LEE)
6. Trends of Electrification in Vehicles (C.W. LEE)
7. Design of High Performance control for Multifunctional Single-Phase Voltage-Source Inverter (K. ZEB)
8. Fuzzy Logic based Fast-Charging of Lithium-Ion Batteries using Temperature Feedback (M.U. ALI)
9. A Mobile System and Devices for Hearing Correction (D.G. PARK)
10. Ess/Off Grid Inverter Switching Control Technic Using Microcontroller (N. BANDARI)
11. Mobile and Wearable Devices for Comfortable neurosensing and Neurofeedback Training (S.F. LIANG)

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12. Eco-Friendly Billboard with supercapacitor and ESS (Energy Storage System) controlled by a personal smart-phone (K.D. IKKURTHI)
13. Application of Supercapacitor in Fine Dust Removal system using two electrodes and IoT (A. SUBRAMANIAN)

No. 207 Meeting Room

1. Some innovation IoT and WoT Systems Integration and Applications (W.T. SUNG)
2. Applications of Deep Learning in Assistive Technologies (M.C. SU)
3. Integrating Blockchain Technology for Data Collection and Analysis in Wireless Sensor Networks with an innovative Implementation (S.J. HSIAO)
4. Environment Monitoring and Intelligent Classification System Based on LoRa Wireless Transmission Technology (C.Y. CHUNG)
5. Lightweight and Robust Video Encryption Method (K. YI)
6. Particle Filters -- Universal Non-Gaussian Filters (N. IKOMA)
7. Incompatibility of DHCP relay agents with the longest matching prefix rule (S. AKASHI)
8. Methodologies and Applications of Swarm Intelligence Techniques Based on Communicating Agents (T. KUMAZAWA)
9. Development of a Music Generation System Based on a Human Instinctive Creativity and a Communication between Human and Music (H. OHMURA)
10. A Study on MANET Construction at Natural Disaster (T. MATSUZAWA)

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11. “Intimate Relationship” with “Virtual Humans” and the “Socialification” of Familyship (H. YAMAGUCHI)
12. A Novel Green Bi-directional PoE System for 5G and IoT (J.J. LIN)
13. Revive Bad Flash-Memory Pages by HLC Scheme (J.W. HSIEH)

SATURDAY 7/21

No. 204 Meeting Room

14. Solving Modern Network Problems with Classical Math (R.S. KO)
15. Constructing Social Network from Text Space (H.G. CHO)
16. Functional transillumination imaging of human body using near-infrared light (K. SHIMIZU)
17. 3D Reconstruction of Absorbing Structure in Scattering Media using Near Infrared Light (Y. KATO)
18. Fundamental Study for Transillumination Imaging of Arteriovenous Fistula (M. KITAMA)

No. 207 Meeting Room

19. Deep Learning Network Model Compression (C.S. LU)
20. 3D Sensing Design and AI Applications (W.C. LAI)
21. Oka Castle VTR - An Application of Visual Translated Reality for Sightseeing of Cultural Heritage (H. OHKI)

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- 22. Innovative Method for Integration of Computational & Data Sciences in the Exa-Scale/Post-Moore Era (K. NAKAJIMA)
- 23. Elimination of Spatial Centrality; Hubness in High-Dimensional Problem and Its Reduction Method (I. SUZUKI)
- 24. Parameterization of Facial Wrinkling and Its Relation to the Subcutaneous Structure (T. MORIYAMA)

POSTER SESSION

- P1. Investigation of Systematic Energy Efficiency in Flywheel Energy Storage System (J. CHO)
- P2. Trace Accuracy Analysis for Improving Sightseeing Trip Timelines (Y. MACHISHIMA)
- P3. Environment Monitoring and Intelligent Classification System Based on LoRa Wireless Transmission Technology (I.T. PENG)
- P4. An Intelligent Personalized Recommendation System for Well Being Contents based on Deep Learning Technique (R. NOUH)
- P5. Mobile Attendance Checking System Utilizing FCM and WLAN AP's information (C. KIM)
- P6. Multi-robot hunting based extended Particle Swarm Optimization algorithm (M. OMIYA)

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- P7. Design of the Halal Food Restaurant Recommendation Algorithm (HAFRA) based on Dynamic Location information and Profiles (J. PARK)
- P8. Effect of digital phase-conjugate light intensity on time-reversal imaging of scattering medium (S. TODA)
- P9. An architecture for the platform serving information for tourist based on context awareness (Jaehun KIM)
- P10. Generating Serif for Characters (K. TAMURA)
- P11. Image analysis of red blood cells aggregation caused by ELF electric field exposure to human body (M. KANEMAKI)
- P12. Position relocation of area surveillance micro robots by collaborative data (Jihwan KIM)

SUNDAY 7/22

No. 202 Meeting Room

25. Highway driving policy with polar coordinate of adjacent vehicles for autonomous vehicle (K. HAN)
26. Deep Learning for Emerging Computer Vision Applications (T.L. LIU)
27. Origin of AIPS image sensor and AIPS processor (Y. HAGIWARA)
28. Application of Artificial Intelligence to Medical Imaging (A. HIZUKURI)

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29. Electronics Device Security against “Celestial Disasters” by Computational Modeling and Simulation – In Search for Mitigation of Solar Superflares and "EMP" (Y. MIZUNO)

No. 207 Meeting Room

25. Mobile Software Testing: Challenges and Pragmatic Solutions (E. PYSHKIN)

26. Demonstration of Network Control Autonomous Driving Vehicle using Dynamic VM migration (N. YAMANAKA)

27. Green IoT: A sensor platform for the semiconductor based multiple hazardous gases (Y. LEE)

28. SINET5, R&E Network for Japan, and NFV service trial for universities (T. KURIMOTO)

29. An A* Algorithm for Constructing Optimal AIFV codes (M. NISHIARA)