

- PS-01** Spatio-Spectral Filter Optimization for Motor Imagery Classification of EEG Signals around Ear  
Yong-Jeong Kim, No-Sang Kwak, Seong-Wghan Lee(Korea Univ.)
- PS-02** A Transfer Learning based on Resting State EEG Data for Zero Training Brain-Computer Interface  
O-Yeon Kwon, Min-Ho Lee, Seong-Wghan Lee(Korea Univ.)
- PS-03** A six-week follow-up study of three-week rTMS treatment of patients with depression  
Kyung Mook Choi<sup>1,2,3</sup>, Soo-Hee Choi<sup>2,3</sup>, Sang Min Lee<sup>2,3,4</sup>, Kuk-In Jang<sup>2,3,4</sup>, Jeong-Ho Chae<sup>2,3,4</sup>,  
Byoung-Kyong Min<sup>1</sup>(Korea Univ., <sup>2</sup>Seoul St. Mary's Hospital, <sup>3</sup>Institute of Biomedical Industry,  
<sup>4</sup>The Catholic Univ., <sup>5</sup>Seoul Nat'l Univ. Hospital)
- PS-04** Video-based automatic seizure detection for seizure semiology using 3D convolutional neural network  
Sung Min You<sup>1</sup>, Baek Hwan Cho<sup>2</sup>, Dae Won Seo<sup>3</sup>, Young Min Shon<sup>3</sup>, Joo Young Kim<sup>1</sup>, Hyun Jun An<sup>1</sup>, Jiyeon Kim<sup>1</sup>, Yeongmyeong Kim<sup>1</sup>, Kyeongwon Cho<sup>1</sup>, In Young Kim<sup>1</sup>(Hanyang Univ., <sup>2</sup>Sungkyunkwan Univ., <sup>3</sup>Samsung Medical Center)
- PS-05** Development of Face Landmark Detection Algorithm for Lie Detection Artificial Intelligence  
Joo Young Kim, Bo Rum Nam, Jiyeon Kim, Yeongmyeong Kim, Soonwon So, Hyun Jun An, Sung Min You, Kyeongwon Cho, In Young Kim(Hanyang Univ.)
- PS-06** Development of predictive model for readmission of patient with ischemic heart disease treated with stents using medical treat statements and routine check-up datas  
Soonwon So, Bo Rum Nam, Jiyeon Kim, Yeongmyeong Kim, Joo Young Kim, Hyun Jun An, Sung Min You, Kyeongwon Cho, In Young Kim(Hanyang Univ.)
- PS-07** Development of voice based gender classification through MFCC analysis  
Hyun Jun An, Yeongmyeong Kim, Jiyeon Kim, Bo Rum Nam, Soonwon So, Joo Young Kim, Sung Min You, Kyeongwon Cho, In Young Kim(Hanyang Univ.)
- PS-08** Impact of Video Quality Degradation on Human Activity Classification  
Jun-Ho Choi, Manri Cheon, Jong-Seok Lee(Yonsei Univ.)
- PS-09** Investigating Performance of Data Fusion Methods with respect to Data Loss  
Jun-Ho Choi, Jong-Seok Lee(Yonsei Univ.)
- PS-10** Speaker Grouping using i-Vectors and Agglomerative Hierarchical Clustering for Speaker Adaptation  
Minsu Kim, Gil-Jin Jang(Kyungpook Nat'l Univ.)
- PS-11** Applying Machine Learning Techniques to the Identification of Prostatic Hyperplasia  
Kyeongwon Cho<sup>1</sup>, Sung Min You<sup>1</sup>, Hyunjun An<sup>1</sup>, Yeongmyeong Kim<sup>1</sup>, Eunkyoung Park<sup>2</sup>, Baek Hwan Cho<sup>2</sup>, In Young Kim<sup>1</sup>, Deok Hyun Han<sup>2</sup>, Kyu-Sung Lee<sup>1</sup>(Hanyang Univ., <sup>2</sup>Sungkyunkwan University School of Medicine)
- PS-12** Ensemble Model-Based Prediction Using Recurrent Neural Networks for Electronic Medical Record  
Donghoon Oh, Seungtae Kang, Sangwon Lee, Gil-Jin Jang(Kyungpook Nat'l Univ.)
- PS-13** Pedestrian Dead Reckoning System with Reduced IMU Cumulative Error based on Heading Change Detection  
Youngwoo Kim, Steven Odongo Eyobu, Dong Seog Han(Kyungpook Nat'l Univ.)
- PS-14** Identification of functional connectivity associated with mindfulness based on mediation analysis in real-time fMRI neurofeedback  
Hyun-Chul Kim<sup>1</sup>, Gunther Meinlschmidt<sup>2,3</sup>, Esther Stalujanis<sup>2</sup>, Angelo Belardi<sup>2</sup>, Sungman Jo<sup>1</sup>, Juhyeon Lee<sup>1</sup>, Dawoon Heo<sup>1</sup>, Dong-Youl Kim<sup>1</sup>, Marion Tegethoff<sup>2</sup>, Seung-Schik Yoo<sup>1</sup>, Jong-Hwan Lee<sup>1</sup>(Korea Univ., <sup>2</sup>Univ. of Basel, <sup>3</sup>Ruhr-Univ. Bochum, <sup>4</sup>Harvard Medical School)
- PS-15** Classification of competitive and collaborative decision-making processes across two reasoning orders: multivoxel pattern analysis of fMRI data  
Dong-Youl Kim<sup>1</sup>, Eun Kyung Jung<sup>1</sup>, Jun Zhang<sup>2</sup>, Soo-Young Lee<sup>3</sup>, Jong-Hwan Lee<sup>1</sup>(Korea Univ., <sup>2</sup>Univ. of Michigan, <sup>3</sup>KAIST)
- PS-16** People estimation-based tracking and counting of people in videos  
Junhyuk Park, Jong-Seok Lee(Yonsei Univ.)
- PS-17** Pedestrian Dead Reckoning System with Reduced IMU Cumulative Error based on Heading Change Detection  
Youngwoo Kim, Steven Odongo Eyobu, Dong Seog Han(Kyungpook Nat'l Univ.)
- PS-18** 3D convolutional neural networks for feature extraction and classification of fMRI volumes acquired from sensorimotor tasks  
Hanh Vu, Hyun-Chul Kim, Jong-Hwan Lee(Korea Univ.)

- PS-19** Deep neural network based subject identification using dynamic functional connectivity patterns in resting-state  
Ju-Hyeon Lee, Hyun-Chul Kim, Jong-Hwan Lee(Korea Univ.)
- PS-20** fMRI study of nicotine craving using MR-compatible e-cigarette equipment using machine learning approach  
Sungman Jo, Da-Woon Heo, Hyun-Chul Kim, Niv Lustig, Jong-Hwan Lee(Korea Univ.)
- PS-21** Classification of mindfulness and mind-wandering states using functional connectivity patterns  
Niv Lustig, Hyun-Chul Kim, Jong-Hwan Lee(Korea Univ.)
- PS-22** Dialog Classification based on Deep Learning for Chatbots  
Dennis Singh Moirangthem, Minho Lee(Kyungpook Nat'l Univ.)
- PS-23** Domain Translation with Generative Adversarial Networks  
Mohammad Ahangar Kiasari, Dennis Singh Moirangthem, Minho Lee(Kyungpook Nat'l Univ.)
- PS-24** Deep Convolutional Neural Network with On/Off Rectified Linear Units  
Nasim Sobhani, Minho Lee(Kyungpook Nat'l Univ.)
- PS-25** Valence-axis recognition using EEG data augmentation  
Jun-Su Kang, Minho Lee(Kyungpook Nat'l Univ.)
- PS-26** A seq-memory-seq chat-bot that considers context information using external memory  
Donghyun Kang, Minho Lee(Kyungpook Nat'l Univ.)
- PS-27** Chat-bot system for understanding flow of conversation based on multiple external memory  
Dongwon Woo, Minho Lee(Kyungpook Nat'l Univ.)
- PS-28** Multiple RGB-D Camera-based User Intent Position and Object Estimation System  
Ki Hoon Kwon, Hyun Min Oh, Min Young Kim(Kyungpook Nat'l Univ.)
- PS-29** Research on learning features of long-term sequential data using neural networks  
Jungrae Cho, Minho Lee(Kyungpook Nat'l Univ.)
- PS-30** Prediction of recurrence period in patients with colorectal cancer using artificial neural network  
Doyoung Kwon, Nasim Sobhani, Soo Yeon Park, Jun Seok Park, Minho Lee(Kyungpook Nat'l Univ.)
- PS-31** Developing Storage and Management Server for Deep Learning using Multi-modal Data Format  
Sanghyeon Lee, Min-Soo Kim(DGIST)
- PS-32** Autonomous Learning of Active Depth Perception based on Intrinsic Motivation  
Tanapol Prucksakorn, Sungmoon Jeong, Nak Young Chong(JAIST)
- PS-33** Object Detection and Recognition Framework for Low Resolution Images with Image Quality Discrimination  
Jeongin Seo, Hyeoyoung Park(Kyungpook Nat'l Univ.)
- PS-34** A Real-Time Noise Reduction Algorithm Using a Recursive Complex Gaussian Mixture Model  
Seo Young Lee, Hyung-Min Park(Sogang Univ.)
- PS-35** Reinforcement Learning model for improving sentence generation  
Do Hyeong Kim, Min Ho Lee(Kyungpook Nat'l Univ.)
- PS-36** Deep Recurrent Neural Network Applied to Incomplete Data  
Gwenaelle Cunha Sergio, Minho Lee(Kyungpook Nat'l Univ.)
- PS-37** Incremental deep support vector data description using support vector machine  
Sungdae Baek, Minho Lee(Kyungpook Nat'l Univ.)
- PS-38** Case Based Reasoning System for Service Recommendation Based on the Interactive Data Acquisition  
Lee Gibbeum, Yi Taeha, Lee Injung, Kim Meerer Candice, Lee Chae-Seok, Lee Ji-Hyun(KAIST)
- PS-39** Parameter Optimization of Online P300 BCI for Home Appliances Control  
Min-Ho Hwang, Min-ju Kim, Hyun-Yung Kim, Ji-Sung Kim, Sung-Phil Kim(UNIST)
- PS-40** Human intent understanding based on enhanced action recognition with object of interest  
Jegyung Son, Minho Lee(Kyungpook Nat'l Univ.)
- PS-41** Understanding the context of video scene based on hierarchical sequence-to-sequence model  
Hosang Yu, Minho Lee(Kyungpook Nat'l Univ.)
- PS-42** Robust Sound Source Localization Using GMM  
Bo Hyun Kim<sup>1</sup>, Kang-Ho Park<sup>2</sup>, Yi-Gyeong Kim<sup>2</sup>, Sung-Q Lee<sup>2</sup>, Hyung-Min Park<sup>1</sup>(<sup>1</sup>Sogang Univ., <sup>2</sup>ETRI)
- PS-43** Convolutional autoencoder based printing defect detection algorithm  
Yongsik Jin<sup>1,2</sup>, Sangmoon Lee<sup>2</sup>, Jongpil Yun<sup>1</sup>(Korea Institute of Industrial Technology, <sup>2</sup>Kyungpook Nat'l University)

# 2018 뇌와 인공지능 심포지엄

PROGRAM ▶▶▶

2018. 1. 30(화)~2.1(목)  
엘리힐리파크 골드홀, 루비홀

**주최** 사단법인 한국뇌공학회

**후원** 고려대학교BK21플러스 뇌공학글로벌소프트웨어 인재양성사업단, 고려대학교 인공지능 대학CT연구센터, 대한전자공학회 컴퓨터사이버터, 한국인공지능학회, 한양대학교 인공지능연구센터, 한양대학교BK21플러스 융합IT기반 미래가치 창조 인재양성사업단, KAIST 뇌과학연구센터 KI 인공지능연구소, KNU-LG전자 융합연구센터

# 2018 뇌와 인공지능 심포지엄 프로그램

## January 30, 2018 (Tue)

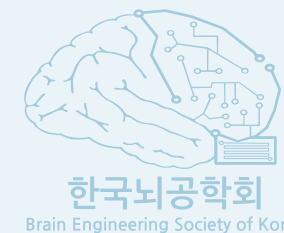
12:00~13:20	Registration
13:20~13:30	Opening Prof. Seong-Whan Lee(Korea Univ.)
<b>Keynote</b>	
13:30~14:30	Neural Circuits for Reinforcement Learning and Mental Simulation Prof. Kenji Doya(OIST)
<b>Invited Talk</b>	
15:00~15:30	Deep Learning for Biomedical Image Reconstruction Prof. Jong Chul Ye(KAIST)
14:50~15:20	Intelligent Mental Health Services with Mobile Personal Big Data Prof. Uichin Lee(KAIST)
15:30~16:00	Coffee Break
16:00~16:30	Computational Approach to Dysfunction in the Brain Prof. Kazushi IKEDA(NAIST)
16:30~17:00	Elucidating the Role of the Macaque Lateral Prefrontal Cortex for the Value-based Decision Making Using the Decoded Neurofeedback Prof. Masamichi Sakagami(Tamagawa Univ.)
<b>Plenary talk</b>	
17:00~18:00	Intelligent Conversational Agent with Emotion and Personality Prof. Soo-Young Lee(KAIST)
18:00~20:00	Banquet

## January 31, 2018 (Wed)

<b>Poster Session</b>	
09:00~11:00	Ruby Hall
<b>Invited Talk</b>	
11:00~11:30	Learning Assistive Strategies for BMI Exoskeleton Robots Prof. Jun Morimoto(ATR)
11:30~12:00	Output Modality Dependent Visual Motion Analysis in the Brain Dr. Hiroaki Gomi(NTT Communication Science Labs.)
12:00~13:10	Lunch
13:10~13:40	Decoding Neural Activity for Intracortical BMIs Prof. Sung-Phil Kim(UNIST)
13:40~14:10	Clova: Future of NAVER AI Dr. Jung Woo Ha(NAVER)
14:10~14:40	Ultrasonic Neuromodulation using a Phased-array System: Digit-level Region-Specific Neuromodulation Prof. Jongbum Seo(Yonsei Univ.)
14:40~15:00	Coffee Break
15:00~15:30	Deep Learning based Natural Language Understanding: Samsung 'Bixby' Junghoe Kim(AI NLU Group, Samsung Electronics. Co., Ltd.)
15:30~16:00	Juxtaposition of Reinforcement Learning in Humans and Machines Prof. Sang Wan Lee(KAIST)
16:00~16:30	KSB: Knowledge-converged AI Framework Dr. Yeounhee Lee(ETRI)
16:30~17:00	A Technology Development of Artificial Intelligence Doctors for Cardiovascular Disease Dr. Jae Hun Choi(ETRI)
17:00~17:30	정기총회

## February 1, 2018 (Thu)

10:00~12:00	Panel Discussion
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## 조직위원

- **조직위원장**  
박형민 (서강대)
- **조직위원**  
장병탁(서울대), 길미만(성균관대), 이민호(경북대), 조성배(연세대), 유범재(KIST), 최재식(UNIST), 황규웅(켈컴)
- **프로그램 위원장**  
장길진(경북대)
- **프로그램 위원**  
남기춘(고려대), 구명완(서강대), 여명숙(게임물관리위원회), 이종환(고려대), 김경환(연세대), 이종석(연세대), 임종진(NeuroSky Inc.), 박혜영(경북대), 신진우(KAIST), 김동주(고려대), 남윤준(일본 이화학연구소), 민병경(고려대), 손정우(대구경북첨단의료산업진흥재단)