12:50 PM - 1:10 PM Room N (IS room)
[1N1-IS-0] Opening of international sessions
1N1-IS-0-01 Opening of international sessions and CybConf (Naohiro Matsumura, Tadahiko Murata)

### Room M (CybConf room) ###
1:20 PM - 3:00 PM Room M (CybConf room)
[1M2-CC] 13:20-15:00 Synergy among Machine Learning, Computational Optimization, and Human Awareness / General Session – A
1M2-CC-01 Enhancing multi-objective chaotic evolution algorithm using an estimated convergence point (Fengkai Guo, Yan Pei)
1M2-CC-02 Towards Learning Hierarchical Structures with SyncMap (Tham Yik Foong, Danilo Vasconcellos Vargas)
1M2-CC-03 Acquiring Consensus Solutions by Multi-human-agent-based Evolutionary Computation (Hironao Sakamoto, Koutaro Nakamoto, Kei Ohnishi)

3:20 PM - 5:00 PM Room M (CybConf room)
[1M3-CC] 15:20-17:00 Machine Learning Application to Medical Engineering
1M3-CC-01 Automatic osteomyelitis area estimation in head CT using anomaly detection (Hideaki Hoshino, Kento Morita, Daisuke Takeda, Takumi Hasegawa, Tetsushi Wakabayashi)
1M3-CC-02 Predictors of Intracerebral Hematoma Enlargement Using Brain CT Images in Emergency Medical Care (Kazunori Oka, Takumi Hirahara, Yasunobu Nohara Sozo Inoue Koichi Arimura, Koji Ihara, Syoji Kobashi)
1M3-CC-03 Automatic benign and malignant estimation of bone tumors using deep learning (Kaito Furuo, Kento Morita, Tomohito Hagi, Tomoki Nakamura, Tetsushi Wakabayashi)
1M3-CC-04 Improving Individually Selectness for Immune Cells using GradCAM (Shoya Kusunose, Yuki Shinomiya, Takashi Ushiwaka, Nagamasa Maeda, Yukinobu Hoshino)

5:20 PM - 5:00 PM Room M (CybConf room)
[1M4-CC] 17:20-19:00 Late Breaking Research Session - A
1M4-CC-01 Prediction of mTSS in Rheumatoid Arthritis of Hand: A Comparison of Approaches Using Machine Learning and Deep Learning (Kohei Nakatsu, Kento Morita, Daisuke Fujita, Syoji Kobashi)
1M4-CC-02 Toward Simulation Analysis of Subsidy Payment Policies Amid COVID-19 Pandemic: Multi-Objective Optimization in Agent-Based Simulation (Yusuke Goto, Hisashi Ichikawa, Hiroyuki Morita, Yasuyuki Shirai)
1M4-CC-03 Estimation of the pelvic fracture degree using 3-D CT images and a 3-D Convolutional Neural Network (Naoto Yamamoto, Daisuke Fujita, Rashedur Rahman, Naomi Yagi, Keigo Hayashi, Akihiro Maruo, Hirotsugu Muratsu, Shoji Kobashi)
1M4-CC-04 Development of system to design the patient specific injection template for uterine cancer treatment (Mutsumi Yamada, Kento Morita, Ryuich Yada, Shuhei Sekii, Tetsushi Wakabayashi)
1M4-CC-05 Can deep-learning predict pediatric brain age from CT images? (Ren Morita, Saya Ando, Daisuke Fujita, Manabu Nii, Kumiko Ando, Reiichi Ishikura, Syoji Kobashi)

### Room N (IS room) ###
1:20 PM - 3:00 PM Room N (IS room)
[1N2-IS-5a] Human interface, education aid (1/2) (Chair: Toshihiro Hiraoka)
1N2-IS-5a-01 Generation of Infographics Considering Information Recipients (Shota Miyoshi, Yuji Nozaki, Maki Sakamoto)
1N2-IS-5a-02 Annotation of Knowledge Amount and Learning Level to Web Pages explaining Academic Concepts (Yuhei Oga, Kosei Soda, Kazuki Tanaka, Takehito Utsuro, Yasuhide Kawada)
1N2-IS-5a-03 Correlation analysis between the learning concentration estimated by EEG and the body motion measured by image sensors (Keita SHIMADA, Shinji CHIBA, Yusuke YOKOTA, Yasushi NARUSE, Ikuko Eguchi YAIRI)
1N2-IS-5a-04 Integration and Interaction of Trustworthy AI in a Virtual Coach / An overview of EU-Japan collaboration on eldercare (Kristiina Jokinen, Keiko Homma, Yoshio Matsumoto, Ken Fukuda)
1N2-IS-5a-05 Recognising flexible intents and multiple domains in extended human-robot dialogues (Graham Wilcock)

3:20 PM - 4:20 PM Room N (IS room)
1N3-IS-5b Human interface, education aid (2/2) (Chair: Toshihiro Hiraoka)
1N3-IS-5b-01 A Prototype System that Transforms Stories in the Level of Conceptual Elements Using a Noun Conceptual Dictionary / Based on the Theme of Love and Sex (○Jumpei Ono, Miku Kawai, Takashi Ogata)
1N3-IS-5b-02 A Prototyping System that Supplements a Kabuki-dance Simulation System with the Background Stories: “Kyōganoko Musume Dōjōji” and the Legend of Dōjōji (○Miku Kawai, Jumpei Ono, Takashi Ogata)
1N3-IS-5b-03 A Way-of-Talking Style Modification Assistance System Based on Apparent Personality (○Nathan Boyer, Mitsuhiko Kimoto, Kohei Okuoka, Yuki Abe, Michita Imai)

5:20 PM - 7:00 PM Room N (IS room)
1N4-IS-1a Knowledge engineering (1/3) (Chair: Akinori Abe)
1N4-IS-1a-01 Data cleansing for development of an oral cancer diagnostic support system (○Akari Noda, Haruka Murakami, Takashi Oya, Yasuhiro Yajima, Kenji Mitsudo, Kazuto Hoshi)
1N4-IS-1a-02 MTabES: Entity Search with Keyword Search, Fuzzy Search, and Entity Popularities (○Phuc Nguyen, Ikuya Yamada, Hideaki Takeda)
1N4-IS-1a-03 A Computational Framework for Studying the Co-Creative Communication as a Bridge Between Individual and Social Creativity (○Guanhong Li, Xiaoyun Guo, Takashi Hashimoto)
1N4-IS-1a-04 Semantic and Topic fused Multimodal Transformer (○Shuhei Tateishi, Sohei Okui, Hirofumi Yashima, Makoto Nakatsuji)
1N4-IS-1a-05 Data-Driven Deep Reinforcement Learning Framework for Large-Scale Service Composition (○Yuya Kondo, Ahmed Moustafa)

### Wednesday, June 9, 2021 ###
### Room A (Main room) ###
11:00 AM - 0:10 PM Room A (Main room)
[2A2-PS-2] When AI Meets the Oldest Engineering Discipline
2A2-PS-2-01 When AI Meets the Oldest Engineering Discipline (Renate Fruchter)

### Room M (CybConf room) ###
9:00 AM - 10:40 AM Room M (CybConf room)
2M1-CC 9:00-10:40 Special Session on Computational Awareness / General Session · A
2M1-CC-01 A CNN Approximation Method Based on Low-bit Quantization and Random Forests (Sho Yatabe, Sora Isobe, Yoichi Tomioka, Hiroshi Saito, Yukide Kohira, Qiangfu Zhao)
2M1-CC-02 Social Awareness from Analysis of Available Time for Automated Defibrillators in a City (Tadahiko Murata, Atsuki Fukushima, Takuya Harada, Mie Sasaki)
2M1-CC-03 Stabilization of the Modular Selective Neural Network Model Based on Inter-Class Correlation (Chowdhury Md Intisar, Kai Su, Huitao Wang, Qiangfu Zhao)
2M1-CC-04 Agent-Based Simulation for Avoiding the Congestions of Tourists (Tadahiko Murata, Kohei Totsuka)

1:20 PM - 3:00 PM Room M (CybConf room)
[2M3-CC] 13:20-15:00 General Session
2M3-CC-01 Parameter Optimization via CMA-ES for Implementation in the Active Control of Magnetic Pillar Arrays (Suparat Gaysornkaew, Danilo Vasconcellos Vargas, Fujio Tsumori)
2M3-CC-02 Preliminary Results for Subpopulation Algorithm Based on Novelty (SAN) Compared with the State of the Art (Yuzi Jiang, Danilo Vasconcellos Vargas)
2M3-CC-03 Relationship between Singing Experience and Laryngeal Movement Obtained by DeepLabCut (Shuri Nakamura, Naomi Yagi, Naoko Kawamura, Hideki Kashioka, Masayuki Hirata, Hitoshi Maezawa, Toshio Yanagida, Yutaka Hata, Yoshitada Sakai)
2M3-CC-04 Lifelong Robot Edutainment based on Self-Efficacy (Rino Kaburagi, Yudai Ishimaru, Wei Hong Chin, Akihiro Yorita, Naoyuki Kubota, Simon Egerton)

3:20 PM - 5:00 PM Room M (CybConf room)
[2M4-CC] 15:20-17:20 Late Breaking Research Session · B
2M4-CC-01 Measurement of Autonomic Nervous System Function during Outdoor Rest: Effect of Membrane Structure Sunshade (Emi Yuda, Junichiro Hayano)
2M4-CC-02 Privacy of Genome in the era of Massive Medical and Health Database (Itaru Kaneko, Emi Yuda)
2M4-CC-03 Prediction of ESWL Outcome Using Model-Based Recursive Partitioning (Daisuke Fujita, Shimpei Yamashita, Ryusuke Deguchi, Syoji Kobashi)
2M4-CC-04 Generative Adversarial Network driven Synthetic Augmentation of Confocal Immunofluorescence Image Segmentation (Daiki Katsuma, Hirhoaru Kawanaka, V.B. Surya Prasath, Bruce J. Aronow)
2M4-CC-05 Artificial Intelligence Driven Video-based Gait Analysis for Cerebral Palsy · Preliminary Evaluation (Shunsuke Okubo, Balaji Iyer, V.B.Surya Prasath, Hirohoaru Kawanaka, Bruce J. Aronow)
2M4-CC-06 A research on Visual Outcome Prediction in Macular Hole Using Optical Coherence Tomography
### Room N (IS room) ###
9:00 AM - 10:40 AM Room N (IS room)

[2N1-IS-2a] Machine learning (1/5) (Chair: Rafal REPKA)
2N1-IS-2a-01 Multi-CartoonGAN for Conditional Artistic Face Translation (〇Rina Komatsu, Tad Gonsalves)
2N1-IS-2a-02 RandECG: Data Augmentation for Deep Neural Network based ECG classification (〇Naoki Nonaka, Jun Seita)

2N1-IS-2a-03 STBM+: Advanced Stochastic Trading Behavior Model for Financial Markets based on Residual Blocks or Transformers (〇Masanori HIRANO, Kiyoshi Izumi, Hiroki Sakaji)
2N1-IS-2a-05 Applying Data-Mining Techniques to Analyze Affective Factors about the Enterovirus Epidemic (〇Jiun-yi Tsai, Jia-Ying Shih)

1:20 PM - 3:00 PM Room N (IS room)

2N3-IS-2b-02 Snowy Night-to-Day Translator and Semantic Segmentation Label Similarity for Snow Hazard Indicator (〇Takato Yasuno Yasuno, Hiroaki Sugawara, Junichiro Fujii, Ryuto Yoshida)
2N3-IS-2b-03 Snowy Night-to-Day Translator and Semantic Segmentation Label Similarity for Snow Hazard Indicator (〇Takato Yasuno Yasuno, Hiroaki Sugawara, Junichiro Fujii, Ryuto Yoshida)
2N3-IS-2b-04 Survey of the VR environment for deep learning model development (〇Taisei Naraha, Kouta Akimoto, Ikuko Eguchi YAIRI)
2N3-IS-2b-05 Generating Search Text Ads from Keywords and Landing Pages via BERT2BERT (〇Kota Ishizuka, Kai Kurogi, Kosuke Kawakami, Daishi Iwai, Kazuhide Nakata)

3:20 PM - 5:00 PM Room N (IS room)

[2N4-IS-2c] Machine learning (3/5) (Chair: Hiroki Shibata)
2N4-IS-2c-01 Analyzing implicit intervention of rumination during web browsing (〇Basanta Raj Giri, Junya Morita, Thanakit Pitakchokchai)
2N4-IS-2c-02 Styled Comic Portrait Synthesis Based on GAN (Lieu-Hen Chen, 〇Yen-Chia Chen, Yuh-Ming Huang)
2N4-IS-2c-03 Improving Music Playback Prediction via Singer Popularity and Aspect-based Sentiment Analysis from Social Network (〇Chia-Hui Chang, Chen-Yu Chen, Arden Chou)
2N4-IS-2c-04 Neural Error Correction for Mobile Keyboard (〇Ting LI, Qiaofei WANG, Xinyang JIANG, Guolin CAO, Gang QIAO)
2N4-IS-2c-05 Performance Evaluation of Japanese BERT Model for Intent Classification Using a Chatbot (〇Kazunori Yawata, Tamao Suzuki, Keisuke Kiryu, Ken Mohri)

### Thursday, June 10, 2021 ###

### Room A (Main room) ###
9:00 AM - 10:40 AM Room A (Main room)

[3A5-PS-5] Participant's networking meeting
3A5-PS-5-01 Participant's networking meeting

### Room M (CybConf room) ###

9:00 AM - 10:40 AM Room M (CybConf room)

[3M1-CC] 9:00-10:40 Synergy among Machine Learning, Computational Optimization, and Human Awareness / General Session – B
3M1-CC-01 A Feasibility Study on Hand Gesture Recognition in Natural Conversation (Dian Christy Silpani, Keishi Suematsu, Kaori Yoshida)
3M1-CC-02 Towards Understanding The Space of Unrobust Features of Neural Networks (Liao Bingli, Takahiro Kanzaki, Danilo Vasconcellos Vargas)
3M1-CC-03 A Proposal of Interactive Tabu Search for Creating Beverage by Blending Source Juices (Masato Fukumoto, Gan Haoran, Yoshiko Hanada)
3M1-CC-04 Evaluation of the Neural-network-based Method to Discover Sets and Representatives of Nonlinearly Dependent Variables (Miho Ohsaki, Hayato Sasaki, Naoya Kishimoto, Shigeru Katagiri, Kei Ohnishi, Yakub Sebastian, Patrick Then)
11:00 AM - 12:40 PM Room M (CybConf room)
[3M2-CC] Plenary Talk
3M2-CC-01 Digital-Twin Fluid Engineering (Shigeru Obayashi)

3:20 PM - 5:00 PM Room M (CybConf room)
[3M4-CC] 15:20-17:00 Special Session on Computational Awareness / General Session – B, Closing Ceremony
3M4-CC-01 Stock Prediction Using LightGBM Optimized Based on Cost Awareness (Xiaosong Zhao, Qiangfu Zhao)
3M4-CC-02 Forecasting Potential Sales of Bread Products at Stores by Network Embedding (Kohei Takahashi, Yusuke Goto)
3M4-CC-03 Estimating the Effect of COVID-19 Contact Tracing Application Using Agent-Based Simulation (Tadahiko Murata, Kanta Yamashita)
3M4-CC-04 Closing Ceremony (Tadahiko Murata, Syoji Kobashi)

### Room N (IS room) ###

9:00 AM - 10:40 AM Room N (IS room)
3N1-IS-2d-01 Yawning Detection under mask for Driver Monitor (〇Tomoya Matsubara, Ahmed Moustafa)
3N1-IS-2d-02 Accurate underwater model based dataset and analysis (〇Shunsuke Takao)
3N1-IS-2d-03 Audio Guide Text Generation of Manual Information for Repairing Precision Equipment (〇Yuriko Yamaya, Shintaro Kawamura, Seigo Harashima, Shinya Igarashi)
3N1-IS-2d-04 MIDI note embedding with fastText model (〇Yingfeng Fu, Yusuke Tanimura, Hidemoto Nakada)
3N1-IS-2d-05 A Tennis Racket Tip Tracking Method from Sequential Images Using A CNN (〇Taichi Hosoi, Hiroshi Hioki)

3:20 PM - 5:00 PM Room N (IS room)
[3N3-IS-2e] Machine learning (5/5) (Chair: Hisashi Kashima)
3N3-IS-2e-01 Anomaly Detection of IoT Cyber Attacks in Smart City Using Machine Learning (〇Ginta Hara, Ahmed Moustafa)
3N3-IS-2e-02 Improving Exploration and Convergence Speed with Multi-Actor Control DDPG (〇David John Lucien Felices, Mitsuhiyo Kimoto, Shoya Matsumori, Michita Imai)
3N3-IS-2e-03 Motion Classification for Automatic Driving (〇Takuma Hayakawa)
3N3-IS-2e-04 A study on the effect of regularization for weight imprinting (〇Paulino Cristovao, Hidemoto Nakada, Yusuke Tanimura, Hideki Asoh)
3N3-IS-2e-05 Deep Inverse Reinforcement Learning with Adversarial One-Class Classification (〇Daiko Kishikawa, Sachiyu Arai)

### Friday, June 11, 2021 ###

### Room A (Main room) ###

5:20 – 6:00 pm Room A (Main room)
[4A5-PS-4] Closing
4A5-PS-4-01 Closing

### Room N (IS room) ###

9:00 AM - 10:40 AM Room N (IS room)
[4N1-IS-3a] Agents (1/2) (Chair: Takahiro Uchiya)
4N1-IS-3a-01 An Audio Prediction Model for Agents that Prefer Familiar Music (〇Rui Yoshinaga, Natsuki Oka, Kazuaki Tanaka)
4N1-IS-3a-02 Estimating Children's Intrinsic Motivation during Class Based on Face Orientation and Gaze Information (〇Keisuke Morita, Natsuki Oka, Kazuaki Tanaka, Masahiro Miyata, Takashi Omori)
4N1-IS-3a-03 Automatic Utterance Selection Based on Prosodic Features of Children's Vocalizations (〇Yuki Kubo, Natsuki Oka, Subaru Hanada, Kazuaki Tanaka, Tomomi Takahashi)
4N1-IS-3a-04 An Automated Negotiation Agent Based on Shared and Local Issues (〇Ahmed Moustafa, Daiki Setoguchi)
4N1-IS-3a-05 Anti Drug Buddy : A Chatbot for advocating the awareness of Anti-Drug (〇Eric Hsiaokuang Wu, Chih-Chieh Yang, Li-Hsien Tang)

11:00 AM - 12:20 PM Room N (IS room)
[4N2-IS-3b] Agents (2/2) (Chair: Shun Okuhara)
4N2-IS-3b-01 Verification of Autonomous Drone Control System for Gathering Information in Disaster Areas (〇Naoto Horie, Sachiyu Arai)
An Analysis of Long-term Development Process on the Agent System Prototyping Platform MiLog / A Report over 20 Years of Its Development (Naoki Fukuta)

Offline Time-Independent Multi-Agent Path Planning (Keisuke Okumura, Yasumasa Tamura, Xavier Defago)

Improving Generalization Capability of Traffic Light Control by Introducing Time Series Information (Yuta Kinouchi, Sachio Arai)

1:40 PM - 3:20 PM Room N (IS room)

Design and implementation of a SWI-Prolog-based expert system to diagnose anxiety disorder (Chern Lin, Kairen Chen)

Effects of Legal Revision in PROLEG (Wachara Fungwacharakorn, Kanae Tsushima, Ken Satoh)

Metagenome analysis of two river microbial flora for modeling river microbial diversity (Jin Michel Ogawa, Tamao Saito, Ikuko Eguchi YAIRI)

Network and behavioural patterns of bots during the early COVID-19 infodemic (Wentao Xu, Kazutoshi Sasahara)

Machine Reading Comprehension of Stock Price News (Seiji Suzuki, Tingxuan Li, Shuting Bai, Gakuto Tsutsumi, Takehito Utsuro, Yasuhide Kawada)

3:40 PM - 5:20 PM Room N (IS room)

The Best Place in Tokyo for Anything / Classifying Stations by Walkability to Specific Amenities (Aaron Louis Bramson, Megumi Hori)

A Study on Machine Translation utilizing Similar Translation Retrieval (Takuya Tamura, Yizhen Wei, Takehito Utsuro, Masaaki Nagata)

Applying a Long Short-Term Memory Approach to a Chaotic Time Series Problem - A Case Study (Jui-Yu Wu, You-Ting Chien)

Learning to Solve Multiple Partial Differential Equations Using Physics-informed Neural Networks (Pongpisit Thanasutives, Masayuki Numao, Ken-ichi Fukui)

Connect6 Opening Leveraging AlphaZero and Job-Level Computing (Shao-Xiong Zheng, Wei-Yuan Hsu, Kuo-Chan Huang, I-Chen Wu)