Poster Session for Thursday September 7, 2023

ThPOS1	Sansui Hall
Machine Control, Electronics, Measurement, Life Engineering, Vehicle (Poster Session 1)	
Chair: Shigeo Kotake	Mie Univ.

14:20-15:20	ThPOS1.1

Swing-up and Swing-down Feedforward Control of a Translational Pendulum by Changing the Period and Amplitude of VFM

Dam, Van Hai	Mie Univ.
Takuma, Yamashita	Mie Univ.
Shigeo, Kotake	Mie Univ.

14:20-15:20	ThPOS1.2

Load Side Angle Control by Twin Drive System Using Torsional Angle of Electromagnetic Motor with Reducer with Drive/Load Side Encoder

Yuto, Ikeda	Mie Univ.
Daisuke, Yashiro	Mie Univ.
Kazuhiro, Yubai	Mie Univ.
Satoshi, Komada	Mie Univ.

14:20-15:20	ThPOS1.3

Identification of Nonlinear Spring Characteristics for Contact Force Control of a Robot Arm Including Motors with Built-In Double Encoders/Reducer

Kyotaro, Noba	Mie Univ.
Yashiro, Daisuke	Mie Univ.
Yubai, Kazuhiro	Mie Univ.
Komada, Sotoshi	Mie Univ.

14:20-15:20	ThPOS1.4

Design of a Propulsion Force Controller with Built in Velocity Estimator Including Delay Time Compensate or Using an Acceleration Sensor and Position Sensor for Electric Propeller Driven Planes

Shinichiro, Bando	Mie Univ.
Daisuke, Yashiro	Mie Univ.
Kazuhiro, Yubai	Mie Univ.
Satoshi, Komada	Mie Univ.

14:20-15:20	ThPOS1.5

Feedforward Vibration Control of 1DOF Overhead Travelling Crane with DC Motor by Using 2 Ponit-Boundary Function and Machine Learning

Shigeo, Kotake	Mie Univ.
Syota, Hamaguchi	Mie Univ.

14:20-15:20	ThPOS1.6

Creation of Iron Loss Model for Efficiency of Switched Reluctance Motor (SRM)

Taichi, Matsunaga	Mie Univ.
Naoki, Yamamura	Mie Univ.

14:20-15:20	ThPOS1.7

Field-Programmable Gate Array-based Parallel Signal Processing in the Multi-Channel Recording-and-Stimulation Single-Board System for Closed-loop Control of Biological Tissue Culture

Satoshi, Wada	Mie Univ.
Kosuke, Takayama	Osaka Univ.
Toshihiro, Shimizu	Osaka Univ.
Tetsuya, Yagi	Osaka Univ.
Yuki, Hayashida	Osaka Univ.

14:20-15:20	ThPOS1.8

This poster is cancelled.

14:20-15:20	ThPOS1.9

Repeated Spring Constant Measurement on Tensile Springs of Pearlite Steel Wire Heat Treated at the Vicinity of A_0 Transformation Point

Kenta, Mizusaki	Mie Univ.
Shigeo, Kotake	Mie Univ.

14:20-15:20	ThPOS1.10

Evaluation of Residual Magnetic Flux Flow around Fractured Surface of SS400 Steel after Charpy Impact Test

Yuki, Nishimuta	Mie Univ.
Shigeo, Kotake	Mie Univ.

14:20-15:20	ThPOS1.11

Estimation of Elastic and Viscous Torque at Ankle Joint Using Time-Varying Elastic Coefficient Model During Passive Plantar/Dorsiflexion

Hiroto, Takai	Mie Univ.
Daisuke, Yashiro	Mie Univ.
Kazuhiro, Yubai	Mie Univ.
Satoshi, Komada	Mie Univ.

14:20-15:20	ThPOS1.12

Gaze Fixation Frequency in Memory Task on Photographs with Randomly Placed Voronoi-Tessellated Multi-Level Blurs

Gen, Anjiki	Mie Univ.
Masaki, Ogawa	Mie Univ.

14:20-15:20	ThPOS1.13

Computer Simulation of the Effect of the Inter-Phase Delay of Biphasic Current Stimulus Pulse on the Induction of Neural Action Potential Responses

Ryo, Fujita	Mie Univ.
Santa, Fukuda	Mie Univ.
Yuki, Hayashida	Mie Univ.

14:20-15:20	ThPOS1.14

Investigation on the Influence of Assist Device Appearance on Weight Sensory Characteristics

Katsunori, Konishi	Mie Univ.
Ryoujun, Ikeura	Mie Univ.
Soichiro, Hayakawa	Mie Univ.
Syunichi, Yoshida	Mie Univ.

14:20-15:20	ThPOS1.15

Association between ECG Monitoring and Signs of Heat Stroke

Ayaka, Fukui	Mie Univ.
Motoki, Ohfuka	Mie Univ.
Soichiro, Hayakawa	Mie Univ.
Ryojun, Ikeura	Mie Univ.
Kenichiro, Yao	Chubu Electric Power Co.
Toshifumi, Sugimoto	Chubu Electric Power Co.

14:20-15:20	ThPOS1.16

A Study on the Duration of Operator's Mass Perception for Using Power-Assist Device

Ryoya, Matsuda	Mie Univ.
Ryoujun, Ikeura	Mie Univ.
Soichiro, Hayakawa	Mie Univ.
Syunichi, Yoshida	Mie Univ.

14:20-15:20	ThPOS1.17

A Three-Dimensional Convolutional Neural Network to Reconstruct Natural Images from Spatiotemporal Neuromorphic Spikes Generated by a Hardware Model of the Biological Retina

Tomoya, Nokura	Mie Univ.
Ryosuke, Okada	Mie Univ.
Shinjiro, Yamamasu	Mie Univ.
Yuki, Hayashida	Mie Univ.

14:20-15:20	ThPOS1.18

Real Time Processing for the Responsive Neural Stimulation for Patient-Specific Epilepsy in an Edge Neural-Network Inference Device

Yuto, Hirano	Mie Univ.
Shinjiro, Yamamasu	Mie Univ.
Yuki, Hayashida	Mie Univ.

14:20-15:20	ThPOS1.19

A Machine Learning-Based Method for Patient-Specific Selection of Electrocorticogram Electrode Placement in Responsive Neurostimulation

Moemi, Yamaji	Mie Univ.
Shinjiro, Yamamasu	Mie Univ.
Yuki, Hayashida	Mie Univ.

14:20-15:20	ThPOS1.20

Development of Operation Support System for Line Heating of Shipbuilding by Using Machine Learning

Shogo, Morii	Mie Univ.
Ryojun, Ikeura	Mie Univ.
Soichiro, Hayakawa	Mie Univ.

14:20-15:20	ThPOS1.21

Evaluation of the Piano Wire Assist Suit's Effectiveness in Reducing Low Back Pain During Long Time Postural Holding Using Surface Electromyogram

Kaito, Yamamoto	Mie Univ.
Ryojun, Ikeura	Mie Univ.
Soichiro, Hayakawa	Mie Univ.
Syunichi, Yoshida	Mie Univ.

14:20-15:20	ThPOS1.22

Exploring the Accuracy of Motion Sickness Intensity Estimation Model Using Facial Surface Temperature Changes

Tatsuki, Ohashi	Mie Univ.
Yuto, Kinoshita	Mie Univ.
Masaki, Ogawa	Mie Univ.

14:20-15:20	ThPOS1.23

Examining Biophysiological Signal Analysis and Detection Methods for Early Identification of Motion Sickness

Yuto, Kinoshita	Mie Univ.
Masaki, Ogawa	Mie Univ.

14:20-15:20	ThPOS1.24

Evaluation of Remote Operation Display Layout to Improve Remote Operability for Autonomous Car

Daichi, Takahashi	Mie Univ.
Soichiro, Hayakawa	Mie Univ.
Ryojun, Ikeura	Mie Univ.

14:20-15:20	ThPOS1.25

Validity Verification for Measuring Lumbar Muscle Fatigue Method during Long-time Driving using Tissue Oxygen Saturation

Kazuaki, Tabata	Mie Univ.
Riku, Inden	Mie Univ.
Naohiro, Tanase	Mie Univ.
Soichiro, Hayakawa	Mie Univ.
Ryojun, Ikeura	Mie Univ.
Shigeyoshi, Tsutsumi	Kagawa Univ.
Takumi, Yamakawa	Tachi-s Co., Ltd.

14:20-15:20	ThPOS1.26

Visibility Evaluation of Underpass Warning Display at Flooding for Car Disaster Prevention

Seiya, Nishimura	Mie Univ.
Soichiro, Hayakawa	Mie Univ.
Ryojun, Ikeura	Mie Univ.

14:30-15:30	ThPOS1.27

Development of Four-Wheel Electric Mobility with New Lean and Suspension Mechanisms

Keigo, Ichio	Mie Univ.
Mitsuru, Fujii	Mie Univ.
Hirokazu, Matsui	Mie Univ.
Norihiko, Kato	Mie Univ.

Poster Session for Friday September 8, 2023

FrPOS2	Sansui Hall
Machine Control, Electronics, Measurement, Life Engineering, Vehicle (Poster Session 2)	
Chair: Shigeo Kotake	Mie Univ.

14:30-15:30	FrPOS2.1

Active Visual Servoing for Automated Disassembling

Kensei, Tanaka	Tokyo Univ. of Sci.
Shogo, Arai	Tokyo Univ. of Sci.

14:30-15:30	FrPOS2.2

Optimization of Manipulator Paths and Fixture Placement for Automation

Shotaro, Natsui	Tokyo Univ. of Sci.
Raito, Murakami	Tokyo Univ. of Sci.
Shogo, Arai	Tokyo Univ. of Sci.

14:30-15:30	FrPOS2.3

Towards Remote Experiment With Inverted Pendulums at Two Distant Locations

Susumu, Hara	Nagoya Univ.
Yuji, Kurasaki	Nagoya Univ.
Daisuke, Tsubakino	Nagoya Univ.
Kazuaki, Ito	Gifu Univ.

14:30-15:30	FrPOS2.4

Transfer Function-Based Stability Analysis for Multi-Agent Molecular Communication Systems Using a Discrete Fourier Transform Matrix

Taishi, Kotsuka	Keio Univ.
Yutaka, Hori	Keio Univ.

14:30-15:30	FrPOS2.5

Robust Design of DNA Circuits against Uncertain Reactions

Ryo, Obana	Kyushu Inst. of Tech.
Kaori, Aso	Kyushu Inst. of Tech.
Takashi, Nakakuki	Kyushu Inst. of Tech.

14:30-15:30	FrPOS2.6

Path Planning for Manipulators to Measure and Grasp Objects with Diverse Optical Properties

Takumi, Sagano	Tokyo Univ. of Sci.
Kennis, Ginga	Tokyo Univ. of Sci.
Shogo, Arai	Tokyo Univ. of Sci.

14:30-15:30	FrPOS2.7

Development and Performance Evaluation of an Optical Tactile Sensor using Transparent Flexible Resin

Masanori, Goka	Fukuyama Univ.
Masami, Yukihira	Fukuyama Univ.

14:30-15:30	FrPOS2.8

3D Modeling of Natural Monument Dochu Sand Pillars with Drone Photography and Setting up VR Environments

Katsushi, Ogawa	Osaka Electro-Communication Univ.
Hiroshi, Yamaguchi	Tokusima Univ.

14:30-15:30	FrPOS2.9

Recent Advances in Force and Torque Metrology in NMIJ

Toshiyuki, Hayashi	Nat. Metrology Inst. of Japan (NMIJ), AIST
Atsuhiro, Nishino	Nat. Metrology Inst. of Japan (NMIJ), AIST

14:30-15:30	FrPOS2.10

Application Example to Non-Destructive Inspection Using Terahertz Wave

Tatsuya, Yaoita	Ken Automation, Inc.

14:30-15:30	FrPOS2.11

Computational Optimization of Essential Oil Blending for Aromatherapy by Multi-objective Genetic Algorithm

Satoshi, Koda	Tokai Univ.
Hiroshi, Someya	Tokai Univ.

14:30-15:30	FrPOS2.12

Motor Imagery Skill Assessment Using Eye Movement Characteristics

Hikaru, Nuruki	Kagoshima Univ.
Taiki, Kawahara	Kagoshima Univ.
Atsuo, Nuruki	Kagoshima Univ.

14:30-15:30	FrPOS2.13

Garment Recognition and Reconstruction Using Object SLAM

Zhang, Yilin	Tohoku Univ.
Hashimoto, Koichi	Tohoku Univ.

14:30-15:30	FrPOS2.14

Gaze Object Prediction with Multi Single-View

Jean-Camille, Seck	Tohoku Univ.
Koichi, Hashimoto	Tohoku Univ.

14:30-15:30	FrPOS2.15

Human Relationship Recognition Based on Human Interactions and Mutual Gazes through Video Analysis

Matus, Tanonwong	Tohoku Univ.
Koichi, Hashimoto	Tohoku Univ.

14:30-15:30	FrPOS2.16

Investigating the Neural Mechanisms of Input Association in the Hippocampus

Shion, Kiba	Tamagawa Univ.
Tadayoshi, Monden	Tamagawa Univ.
Naoki, Nakajima	Kyushu Inst. of Inform. Sci.
Takeshi, Aihara	Tamagawa Univ.

14:30-15:30	FrPOS2.17

Association of Place and Odor Input Information in the Dentate Gyrus of the Hippocampus

Hayato, Tanaka	Tamagawa Univ.
Naoki, Nakajima	Kyushu Inst. of Inform. Sci.
Hirofumi, Hayakawa	Tamagawa Univ.
Tadanobu, Kamijyo	Univ. of the Ryukyu
Takeshi, Aihara	Tamagawa Univ.

14:30-15:30	FrPOS2.18

Text Mining Analysis on Online Music Reviews: A Pilot Study on Dream Theater

Kodai, Kitagawa	Nat. Inst. of Tech., Hachinohe College
Toshifumi, Tanaka	Independent Researcher

14:30-15:30	FrPOS2.19

Comparison of Regression Models for Foot Position Prediction during Patient Lifting Motion using a Single Inertial Sensor

Kodai, Kitagawa	Nat. Inst. of Tech., Hachinohe College
Chikamune, Wada	Kyushu Inst. of Tech.
Takayuki, Nagasaki	Reiwa Health Sci. Univ.
Sota, Nakano	Kyushu Univ. of Nursing and Social Welfare
Mitsumasa, Hida	Osaka Kawasaki Rehabilitation Univ.
Shogo, Okamatsu	Hot-Will Co., Ltd.

14:30-15:30	FrPOS2.20

Muscle Coordination Patterns in Regulation of Medial Gastrocnemius Activation during Walking

Benio, Kibushi	Kobe Univ.

14:30-15:30	FrPOS2.21

Development of an Immersive Virtual Space System Utilizing Visual Search Tasks for Unilateral Spatial Neglect

Atsuo, Nuruki	Kagoshima Univ.
Hikaru, Nuruki	Kagoshima Univ.

Kento, Nose	Kagoshima Univ.
Seiji, Etoh	Kagoshima Univ.
Kentaro, Kawamura	Kagoshima Univ.

| 14:30-15:30 | FrPOS2.22 |

Basic Experiments Testing an Operation System for 5 DOFs Shoulder Prosthesis Using Simple Speech Recognition Device

| Masashi, Sekine | Chiba Univ. |
| Wenwei, Yu | Chiba Univ. |

| 14:30-15:30 | FrPOS2.23 |

Tracking of Moving Obstacles using Partitioned EKF-SLAM

Qiong, Pan	Tokyo City Univ.
Kazuma, Sekiguchi	Tokyo City Univ.
Kenichiro, Nonaka	Tokyo City Univ.

| 14:30-15:30 | FrPOS2.24 |

A Study on Automation of Pneumatic Caisson Method (Automatic Recognition of Earth Bucket and Testing Using Actual Equipment)

Hayato, Osaki	Nippon Inst. of Tech.
Kiichiro, Ishikawa	Nippon Inst. of Tech.
Yusen, Inagawa	Obayashi Co.
Taichi, Terui	Obayashi Co.
Shinichi, Tachibana	Ohmoto Gumi Co., Ltd.
Shingo, Tsugawa	Ohmoto Gumi Co., Ltd.

| 14:30-15:30 | FrPOS2.25 |

Derivation of a Fuel Consumption Model for a Ship under Sea Waves Disturbance

Takuma, Imamura	
	Tokyo Univ. of Marine Sci. and Tech.
Shang, FeiFei	
	Tokyo Univ. of Marine Sci. and Tech.
Masakazu, Koike	
	Tokyo Univ. of Marine Sci. and Tech.
Junichiro, Tahara	
	Tokyo Univ. of Marine Sci. and Tech.

| 14:30-15:30 | FrPOS2.26 |

UAV Delivery Flight to the Veranda Identified Using 2D Codes

Masato, Ishii	Shibaura Inst. of Tech.
Satoko, Abiko	Shibaura Inst. of Tech.
Takumi, Yoshihara	Shibaura Inst. of Tech.
Teppei, Tsujita	Nat. Defense Academy of Japan
Daisuke, Sato	Tokyo City Univ.

| 14:30-15:30 | FrPOS2.27 |

A PMP-based Numerical Solution for Mean Field Game Problem

Fuguo, Xu	Chiba Univ.
Tielong, Shen	Sophia Univ.
Tatsuya, Kuboyama	Chiba Univ.
Yasuo, Moriyoshi	Chiba Univ.

| 14:30-15:30 | FrPOS2.28 |

Mean Field LQG Social Optimization: A Reinforcement Learning Approach

| Zhenhui, Xu | Tokyo Inst. of Tech. |
| Tielong, Shen | Sophia Univ. |