



		Premier Ballroom (A/B)
Session Title	Live Demo Presentation Session 2 (D1P1~D1P26)	
Session Chair	Andrea Bianchi (KAIST, Korea)	
Date	November 15, 2018 (Thursday)	
Time	14:30~16:00	

- D1P01 14:30-14:35(5')** **[Invited] Stiffness Perception of Virtual Objects Using FOLDAWAY-Touch**
Marco Salerno, Stefano Mintchev, Alexandre Cherpillod, Simone Scaduto, and Jamie Paik
EPFL, Switzerland
- D1P02 14:35-14:40(5')** **[Invited] Smart Bracelets to Represent Direction of Social Touch with Tactile Apparent Motion**
Taku Hachisu and Kenji Suzuki
University of Tsukuba, Japan
- D1P03 14:40-14:45(5')** **[Invited] "HaptiComm", a Haptic Communicator Device for Deafblind Communication**
Basil Duvernoy¹, Sven Topp², and Vincent Hayward³
¹Institut des Systemes Intelligents et de Robotique, France, ²University of Sydney, Australia, ³University of London, UK
- D1P04 14:45-14:50(5')** **[Invited] A Novel Fingertip Tactile Display for Concurrently Displaying Texture and Orientation**
Harsimran Singh¹, Sang-Goo Jeong², Syed Zain², and Jee-Hwan Ryu²
¹Institute of Robotics and Mechatronics in the German Aerospace, Germany, ²Korea University of Technology and Education, Korea
- D1P05 14:50-14:55(5')** **[Invited] Estimation of Racket Grip Vibration from Tennis Video by Using Neural Network**
Kentaro Yoshida, Yuuki Horiuchi, Tomohiro Ichiyama, Seki Inoue, Yasutoshi Makino, and Hiroyuki Shinoda
The University of Tokyo, Japan
- D1P06 14:55-14:58(3')** **Skin Vibration-Based Tactile Tele-Sharing**
Tomohiro Fukuda and Yoshihiro Tanaka
Nagoya Institute of Technology, Japan
- D1P07 14:58-15:01(3')** **An Attempt of Displaying Softness Feeling Using Multi-Electrodes-Based Electrostatic Tactile Display**
Hirobumi Tomita¹, Satoshi Saga², Hiroyuki Kajimoto³, Simona Vasilache¹, and Shin Takahashi¹
¹University of Tsukuba, Japan, ²Kumamoto University, Japan, ³The University of Electro-Communications, Japan



- D1P08 15:01-15:04(3')** **Development of a Teleoperation Precision Grasping System with a Haptic Feedback Sensation on the User's Fingertip**
Aiman Omer¹, Jamal Hamdi², and Atsuo Takanishi¹
¹Waseda University, Japan, ²Umm Al-Qura University, Saudi Arabia
- D1P09 15:04-15:07(3')** **Interactive Virtual Fixture Generation for Shared Teleoperation in Unstructured Environments**
Vitalii Pruks and Jee-Hwan Ryu
Korea University of Technology and Education, Korea
- D1P10 15:07-15:10(3')** **Preliminary Study on Gap Detection Threshold of Textured Surface**
Seitaro Kaneko¹, Kohei Matumori², Naoki Saito², and Hiroyuki Kajimoto¹
¹The University of Electro-Communications, Japan, ²Shiseido Global Innovation Center, Japan
- D1P11 15:10-15:13(3')** **VR Training System of Step Timing for Baseball Batter Using Force Stimulus**
Wataru Sakoda¹, Toshio Tsuji¹, and Yuichi Kurita^{1,2}
¹Hiroshima University, Japan, ²JST PRESTO, Japan
- D1P12 15:13-15:16(3')** **Reducing 3D Vibrations to 1D in Real Time**
Gunhyuk Park and Katherine J. Kuchenbecker
Max Planck Institute for Intelligent Systems, Germany
- D1P13 15:16-15:19(3')** **A Soft Tactile Display Using Dielectric Elastomer Actuator for Fingertip Interaction**
Jung-Hwan Youn, Seung-Mo Jeong, Young-Seok Choi, and Ki-Uk Kyung
Korea Advanced Institute of Science and Technology, Korea
- D1P14 15:19-15:22(3')** **Configuration of Haptic Feedback Based Relief Robot System**
Byung-jin Jung¹, Tae-Keun Kim¹, Geon Won¹, Dong Sub Kim¹, Jung-Hoon Hwang¹ and Jee-Hwan Ryu²
¹Korea Electronics Technology Institute, Korea, ²Korea University of Technology and Education, Korea
- D1P15 15:22-15:25(3')** **TouchPhoto: Enabling Independent Picture-Taking and Understanding of Photos for Visually-Impaired Users**
Yongjae Yoo, Jongho Lim, Hanseul Cho, and Seungmoon Choi
Pohang University of Science and Technology, Korea
- D1P16 15:25-15:28(3')** **Human-Agent Shared Teleoperation: A Case Study Utilizing Haptic Feedback**
Affan Pervez¹, Hiba Latifee², Jee-Hwan Ryu², and Dongheui Lee^{1,3}
¹Technical University of Munich, Germany, ²Korea University of Technology and Education, Korea, ³German Aerospace Center, Germany
- D1P17 15:28-15:31(3')** **Induced Pulling Sensation by Synthesis of Frequency Component for Voice-Coil Type Vibrators**
Takeshi Tanabe, Hiroaki Yano, and Hiroo Iwata



University of Tsukuba, Japan

- D1P18** 15:31-15:34(3') **Hands-on Demonstration of Heterogeneous Haptic Texturing of Mesh Models Based on Image Textures**
Arsen Abdulali, Waseem Hassan, Baek Seung Jin, and Seokhee Jeon
Kyung Hee University, Korea
- D1P19** 15:34-15:37(3') **Real-time Mapping of Sensed Textures into Vibrotactile Signals for Sensory Substitution**
Jaeyoung Park, Woo-seong Choi, and Keehoon Kim
Korea Institute of Science and Technology, Korea
- D1P20** 15:37-15:40(3') **Towards Automatic Synthesis of Motion Effects**
Sangyoon Han¹, Jaebong Lee², and Seungmoon Choi¹
¹Pohang University of Science and Technology, Korea, ²NVIDIA, USA
- D1P21** 15:40-15:43(3') **Development of a Rigidity and Volume Control Module Using a Balloon Filled with Dilatant Fluid**
Saizoh Kojima, Hiroaki Yano, and Hiroo Iwata
University of Tsukuba, Japan
- D1P22** 15:43-15:46(3') **Using Wearable Haptics for Thermal Discrimination in Virtual Reality Scenarios**
Guido Gioioso¹, Maria Pozzi^{1,2}, Mirko Aurilio², Biagio Peccerillo¹, Giovanni Spagnoletti¹, and Domenico Prattichizzo^{1,2}
¹University of Siena, Italy, ²Istituto Italiano di Tecnologia, Italy
- D1P23** 15:46-15:49(3') **A Wearable Hand Haptic Interface to Provide Skin Stretch Feedback to the Dorsum of a Hand**
Hyunwoong Choi¹, Bukun Son¹, Sangyoon Kim¹, Yonghwan Oh², and Jaeyoung Park²
¹Seoul National University, Korea, ²Korea Institute of Science and Technology, Korea
- D1P24** 15:49-15:52(3') **The Thermal Feedback Influencer: Wearable Thermal Display for Enhancing the Experience of Music Listening**
Yuri Ishikawa¹, Anzu Kawazoe², George Chernyshov¹, Shinya Fuji¹, and Masashi Nakatani^{1,3}
¹Keio University, Japan ²The University of California, USA, ³JST PRESTO, Japan
- D1P25** 15:52-15:55(3') **Midair Ultrasound Haptic Display with Large Workspace**
Shun Suzuki, Masahiro Fujiwara, Yasutoshi Makino, and Hiroyuki Shinoda
University of Tokyo, Japan
- D1P26** 15:55-15:58(3') **Haptopus : HMD with Built-In Pressure Sense Presentation Device by Suction Stimulus**
Takayuki Kameoka, Yuki Kon, Takuto Nakamura, and Hiroyuki Kajimoto
The University of Electro-Communications, Japan