HMS Oral Sessions:

**October 6  8:00 – 9:40  6KC303m**

**HMS 1**  Human Performance Modeling

Session Chairs:  
TBA

<table>
<thead>
<tr>
<th>Paper #</th>
<th>Paper Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>599</td>
<td>Formal Performance Guarantees for an Approach to Human in the Loop Robot Missions</td>
</tr>
<tr>
<td>676</td>
<td>Quantitative Evaluation of Intellectual Productivity Considering Depth of Concentration</td>
</tr>
<tr>
<td>273</td>
<td>Joint Torques Are Associated with Speed-Accuracy Trade-Offs During Human Reaching Movements</td>
</tr>
<tr>
<td>414</td>
<td>Modeling Goal-Directed Movements in Modern Pistol Competition</td>
</tr>
<tr>
<td>190</td>
<td>Predicting Human Performance in Interactive Tasks by Using Dynamic Models</td>
</tr>
</tbody>
</table>

**October 6  8:00 – 9:40  6KC205m**

**HMS 2**  Medical Informatics

Session Chairs:  
TBA

<table>
<thead>
<tr>
<th>Paper #</th>
<th>Paper Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>376</td>
<td>Motion Analysis in Lower Extremity Joints During Ski Carving Turns Using Wearable Inertial Sensors and Plantar Pressure Sensors</td>
</tr>
<tr>
<td>930</td>
<td>Construction of a Respiratory-Induced Lung Tumor Motion Model Using Phase Oscillator</td>
</tr>
<tr>
<td>913</td>
<td>Kinetic and Spatiotemporal Gait Analysis System Using Instrumented Insoles and Laser Range Sensor</td>
</tr>
<tr>
<td>125</td>
<td>A Decision Support System for Cancer Differentiation Therapy with Game-Theoretic Rough Sets</td>
</tr>
<tr>
<td>364</td>
<td>Development and Evaluation of a Corrective Feedback System Using Augmented Reality for the High-Quality Cardiopulmonary Resuscitation Training</td>
</tr>
<tr>
<td>Paper#</td>
<td>Paper Title</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>1132</td>
<td>Visual Attention Control Using Peripheral Vision Stimulation</td>
</tr>
<tr>
<td>496</td>
<td>A Supporting System for Quick Dementia Screening Using PIR Motion Sensor in Smart Home</td>
</tr>
<tr>
<td>663</td>
<td>Effects of Output Speed Threshold on Real-Time Continuous EMG Human-Machine Interface Control</td>
</tr>
<tr>
<td>646</td>
<td>BrailleBand: Blind Support Haptic Wearable Band for Communication Using Braille Language</td>
</tr>
<tr>
<td>966</td>
<td>Study on the Force Myography Sensors Placement for Robust Hand Force Estimation</td>
</tr>
<tr>
<td>812</td>
<td>An Interactive Virtual Mirror to Support Makeup for Visually Impaired Persons</td>
</tr>
<tr>
<td>1169</td>
<td>Navigational Path Detection for the Visually Impaired Using Fully Convolutional Networks</td>
</tr>
<tr>
<td>882</td>
<td>Adaptive Stimulus Selection in ERP-Based Brain-Computer Interfaces by Maximizing Expected Discrimination Gain</td>
</tr>
<tr>
<td>303</td>
<td>Development of a String Driven Walking Assist Device Actuated by Upper Body</td>
</tr>
<tr>
<td>827</td>
<td>Does Tactile Feedback Enhance Single-Trial Detection of Error-Related EEG Potentials?</td>
</tr>
<tr>
<td>517</td>
<td>Analysis of Relationship between Target Visual Cognition Difficulties and Gaze Movements in Visual Search Task</td>
</tr>
</tbody>
</table>
October 6 13:20 – 17:00 6PDC301f

HMS 4 Human Factors

Session Chairs:
TBA

<table>
<thead>
<tr>
<th>Paper #</th>
<th>Paper Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>310</td>
<td>Adaptable and Enjoyable Control of Human Motion: Proprioception Focused Approach</td>
</tr>
<tr>
<td>491</td>
<td>Driver Response Times to Auditory, Visual and Tactile Take-Over Requests: A Simulator Study with 101 Participants</td>
</tr>
<tr>
<td>483</td>
<td>Estimation of Cognitive Load Based on the Pupil Size Dilation</td>
</tr>
<tr>
<td>502</td>
<td>Linking Sensory Perceptions and Physical Properties of Orange Drinks</td>
</tr>
<tr>
<td>1061</td>
<td>Context Respectful Counseling Agent Integrated with Robot Nodding for Dialog Promotion</td>
</tr>
<tr>
<td>761</td>
<td>Variable Force-Stiffness Haptic Feedback for Learning a Disturbance Rejection Task</td>
</tr>
<tr>
<td>415</td>
<td>A Human-Like Steering Model Sensitive to Uncertainty in the Environment</td>
</tr>
<tr>
<td>993</td>
<td>An Open Source Adaptive User Interface for Network Monitoring</td>
</tr>
<tr>
<td>430</td>
<td>Dominance and Movement Cues of Robot Motion - a User Study on Trust and Predictability</td>
</tr>
<tr>
<td>282</td>
<td>Effect of Personal Data Aggregation Method on Estimating Group Stress with Wearable Sensor</td>
</tr>
<tr>
<td>723</td>
<td>A Hybrid Eye-Tracking Method Using a Multispectral Camera</td>
</tr>
</tbody>
</table>
October 6 13:20 – 17:00  6MB253f

HMS 5 Human-Machine Cooperation & Systems

Session Chairs: TBA

<table>
<thead>
<tr>
<th>Paper #</th>
<th>Paper Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>586</td>
<td>Ankle Stretching Rehabilitation Machine for Equinovarus: Design and Evaluation from Clinical Aspects</td>
</tr>
<tr>
<td>272</td>
<td>Event-Driven Data Transmission in Variable-Delay Network</td>
</tr>
<tr>
<td>1168</td>
<td>Prediction of Lower-Limb Joint Kinematics from Surface EMG During Overground Locomotion</td>
</tr>
<tr>
<td>1102</td>
<td>Human-Interactive Robot for Gait Evaluation and Navigation</td>
</tr>
<tr>
<td>1119</td>
<td>Model-based Prediction of Workload for Adaptive Associate Systems</td>
</tr>
<tr>
<td>1236</td>
<td>Dynamic Posture Estimation in a Network of Depth Sensors Using Sample Points</td>
</tr>
<tr>
<td>1147</td>
<td>A Narrow Road Driving Assistance System Based on Driving Style</td>
</tr>
<tr>
<td>1204</td>
<td>Perceive the Difference: Vehicle Pitch Motions As Feedback for the Driver</td>
</tr>
<tr>
<td>831</td>
<td>Comparing Parallel and Sequential Control Parameter Tuning for a Powered Knee Prosthesis</td>
</tr>
<tr>
<td>114</td>
<td>Recurrent Convolutional Networks Based Intention Recognition for Human-Robot Collaboration Tasks</td>
</tr>
<tr>
<td>Paper #</td>
<td>Paper Title</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>929</td>
<td>360° View Camera Based Visual Assistive Technology for Contextual Scene Information</td>
</tr>
<tr>
<td>797</td>
<td>Frequency-Band and Electrode-Channel Selection for Motion Discrimination from Electroencephalography Using L1-Constrained Least Squares</td>
</tr>
<tr>
<td>950</td>
<td>Robust and Accurate State-Of-Charge Estimation for Lithium-Ion Batteries Using Generalized Extended State Observer</td>
</tr>
<tr>
<td>758</td>
<td>Live-Feeling Communication: Multi-Algorithm Approach to the Estimation of Human Intentions</td>
</tr>
<tr>
<td>1151</td>
<td>Optimized Detector for Closed-Loop Devices for Neurostimulation</td>
</tr>
<tr>
<td>973</td>
<td>CARTS: Constraint-Based Analytics from Real-Time System Monitoring</td>
</tr>
<tr>
<td>915</td>
<td>S3Email: A Method for Securing Emails from Service Providers</td>
</tr>
</tbody>
</table>
October 7 13:20 – 17:00

HMS 7  User Interface Design & User Feedback

Session Chairs:
TBA

<table>
<thead>
<tr>
<th>Paper #</th>
<th>Paper Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>118</td>
<td>Effect of Feedback Type and Modality on Human Motivation</td>
</tr>
<tr>
<td>171</td>
<td>Effects of Different Types of Correctness Feedback on Children's Performance with a Mobile Math App</td>
</tr>
<tr>
<td>681</td>
<td>Development of Automatic Matching and Image Quality Improving Methods for Scattering 3D Display</td>
</tr>
<tr>
<td>380</td>
<td>Audience Excitement Reflected in Respiratory Phase Synchronization</td>
</tr>
<tr>
<td>1073</td>
<td>HMI-Guard: A Platform for Detecting Errors in Human-Machine Interfaces</td>
</tr>
<tr>
<td>123</td>
<td>GUI-Driven Intelligent Tutoring System with Sensor-Free Affective Support to Help Learning the Algebraic Method</td>
</tr>
<tr>
<td>940</td>
<td>DesignAR: Portable Projection-Based AR System Specialized in Interior Design</td>
</tr>
</tbody>
</table>
### Paper Titles and Abstracts

<table>
<thead>
<tr>
<th>Paper #</th>
<th>Paper Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1071</td>
<td>Facilitating Player Progression by Implementing Procedural Music in Videogames</td>
</tr>
<tr>
<td>564</td>
<td>Cognitive Adaptability to Optimize Online Behavior Personalizing Digital Workspaces with Virtual Reality</td>
</tr>
<tr>
<td>815</td>
<td>Haptics and Virtual Reality Based Bilateral Shared Telemanipulation of Aerial Vehicle Over Open Communication Network</td>
</tr>
<tr>
<td>537</td>
<td>A Texture Display Using Vibrotactile and Electrostatic Friction Stimuli Surpasses One Based on Either Type of Stimulus</td>
</tr>
<tr>
<td>1219</td>
<td>Depth-Level Based Camouflaging Using RGB-D Sensor</td>
</tr>
<tr>
<td>850</td>
<td>Development and Pilot Test of a Virtual Reality System for Electric Powered Wheelchair Simulation</td>
</tr>
<tr>
<td>166</td>
<td>Real-Time Head Gesture Recognition on Head-Mounted Displays Using Cascaded Hidden Markov Models</td>
</tr>
<tr>
<td>1198</td>
<td>Usage of Tactile Feedback to Assist Cooperative Object Manipulations in Virtual Environments</td>
</tr>
<tr>
<td>1149</td>
<td>Combining Wristband-Type Devices and Smartphones to Detect Falls</td>
</tr>
<tr>
<td>725</td>
<td>Wearable Flexible Device for Respiratory Phase Measurement based on Sound and Chest Movement</td>
</tr>
<tr>
<td>724</td>
<td>Recognition of Daily Routines and Accidental Event with Multipoint Wearable Inertial Sensing for Seniors Home Care</td>
</tr>
</tbody>
</table>