

Dr. Jan van Erp and His *Team i-Botics* Took Fifth Place in the ANA Avatar XPRIZE

Dr. Jan van Erp is an active IEEE SMC Member. He co-chairs the IEEE Future Directions on Telepresence Project, which has as goal to advance telepresence technology that would enable a user's remote presence at a different physical location. Jan and his team had their paper titled "What Comes After Telepresence? Embodiment, Social Presence and Transporting One's Functional and Social Self" receive the Franklin V. Taylor Memorial Award for the best oral presentation and paper at the SMC 2022 Conference (<https://ieeexplore.ieee.org/document/9945544>). **And they have made headlines again!**

In early November 2022, the ANA Avatar XPRIZE finals took place in Long Beach, CA. The task for this XPRIZE competition was to "*integrate multiple emerging technologies to develop a physical, non- autonomous Avatar System with which an operator can see, hear, and interact within a remote environment in a manner that feels as if they are truly there.*" (<https://avatar.xprize.org/prizes/avatar>). Jan and his *Team i-Botics* created an avatar robot (see images below) that enables interaction in a functional way (for instance traversing a route with obstacles and grabbing and manipulating objects) as well as in a social way (for instance exchanging bidirectional, non-verbal social cues like eye contact and body posture). Their solution won the 5th place prize after several days of intense testing.

Team i-Botics consisted of six partners: TNO, University of Twente and Sensiks from the Netherlands, Haption from France, ETH Zurich from Switzerland, and Halodi robotics from Norway. The user requirements and implemented solution is described in more detail in their award-winning SMC 2022 paper highlighted above.

Congratulations to Dr. van Erp and his team for such wonderful accomplishments! We look forward to some demos at SMC 2023 in Maui, Hawaii!



Fig. 1. Operator controls a humanoid avatar robot and receives multisensory feedback including vision, audition, temperature, force, and tactile cues.



Fig. 2: The humanoid avatar depicts the animated face of the operator in real time. This allows the people in the remote environment to identify the operator, read the operator's facial expressions and follow the eye gaze of the operator.