

IEEE-AIVR 2019: IEEE INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE AND VIRTUAL REALITY 2019

PRELIMINARY PROGRAM (**changes may still apply!**)

Monday, December 9th (preliminary program, changes may still apply)

07:30-08:30 Breakfast (included in registration)

07:30-17:00 Registration

08:30-09:40 Session 1: Opening & keynote

08:30 [Wolfgang Hürst](#)
IEEE ISM & AIVR Opening (by general co-chairs)

08:40 [Hrvoje Benko](#)
TBD

09:40-10:00 Coffee break

10:00-11:30 Session 2: Paper presentations (full papers)

10:00 [Wolfgang Hürst](#)
Message by IEEE AIVR co-chairs & program co-chairs

10:15 [Junya Ueda](#) and [Katsunori Okajima](#)
AR food changer using deep learning and cross-modal effects

10:40 [Jason Orlosky](#), [Brandon Hyunh](#) and [Tobias Hollerer](#)
Using Eye Tracked Virtual Reality to Classify Understanding of Vocabulary in Recall Tasks

[Alexandre Moreira Nascimento](#), [Anna Carolina Muller Queiroz](#), [Lucio Flavio Vismari](#), [Jeremy Bailenson](#),

11:05 [Paulo Cugnasca](#), [Joao Camargo](#) and [Jorge Rady](#)
The Role of Virtual Reality in Autonomous Vehicles Safety: A Systematic Literature Mapping

11:30-12:30 Session 3: Keynote

11:30 [Vishy Swaminathan](#)
TBD

12:30-14:00 Lunch (on your own)

14:00-15:45 Session 4A: Paper presentations (short & industry papers)

[Esra Ataer-Cansizoglu](#), [Hantian Liu](#), [Tomer Weiss](#), [Archi Mitra](#), [Dhaval Dholakia](#), [Jae-Woo Choi](#) and [Dan](#)

14:00 [Wulin](#)
Room Style Estimation for Style-Aware Recommendation

[Andreas Luxenburger](#), [Jonas Mohr](#), [Torsten Spieldenner](#), [Dieter Merkel](#), [Fabio Espinosa](#), [Florian](#)

14:15 [Reinicke](#), [Julian Ahlers](#), [Markus Stoyke](#) and [Tim Schwartz](#)
Augmented Reality for Human-Robot Cooperation in Aircraft Assembly

14:30 [Wallas H. S. Santos](#), [Isabela Chambers](#), [Emilio V. Brazil](#) and [Marcio F. Moreno](#)
Structuring and inspecting 3D anchors for seismic volume into Hyperknowledge Base in virtual reality

14:45 [Gang Li](#)

- Deep Exploration on VR-Induced Attention
- 15:00 [Koki Hirota](#) and [Takashi Komuro](#)
Situation-adaptive object grasping recognition in VR environment
- 15:15 [Menghe Zhang](#), [Junsong Zhang](#) and [Dong Zhang](#)
ATVR: An Attention Training System using Multitasking and Neurofeedback on Virtual Reality Platform
- 15:30 [Tinglin Duan](#), [Parinya Punpongsanon](#), [Sheng Jia](#), [Daisuke Iwai](#), [Kosuke Sato](#) and [Konstantinos Plataniotis](#)
Remote Environment Exploration with Drone Agent and Learning-based 3D Reconstruction

14:00-15:45 Session 4B: Workshop CRHD (part 1)

15:45-16:15 Coffee break

16:15-18:00 Session 5A: Workshop AIXR

16:15-18:00 Session 5B: Workshop CRHD (part 2)

18:30-21:00 Reception

Tuesday, December 10th (preliminary program, changes may still apply)

07:30-08:30 Breakfast (included in registration)

07:30-17:00 Registration

08:30-09:30 Session 6: Keynote

08:30 [Jeremy Bailenson](#)
TBD

09:30-09:50 Coffee break

09:50-11:30 Session 7: Paper presentations (best paper candidates)

09:50 [Johanna Vielhaben](#), [Hüseyin Camalan](#), [Wojciech Samek](#) and [Markus Wenzel](#)
Field of View Forecasting in Virtual Reality with Machine Learning

10:15 [Ferdinand de Coninck](#), [Zerrin Yumak](#), [Guntur Sandino](#) and [Remco Veltkamp](#)
Non-verbal Behavior Generation for Virtual Characters in Group Conversations

[Ashwin Ajit](#), [Sean Banerjee](#) and [Natasha Kholgade Banerjee](#)
10:40 Combining Pairwise Feature Matches from Device Trajectories for Biometric Authentication in Virtual Reality Environments

11:05 [Alisha Sharma](#) and [Jonathan Ventura](#)
Unsupervised Learning of Depth and Ego-Motion from Cylindrical Panoramic Video

11:30-12:30 Session 8: Keynote

11:30 [Chris Dede](#)
TBD

12:30-14:00 Lunch (on your own)

14:00-15:00 Session 9: Keynote

14:00 [Pablo Cesar](#)
TBD

15:00-18:00 Session 10: Posters & demos (incl. coffee break from 15:45-16:15)

15:00 [Alireza Bahremand](#), [Linda Nguyen](#), [Tanya Harrison](#) and [Robert Likamwa](#)
HoloLucination: A Framework for Live Augmented Reality Presentations across Mobile Devices

15:00 [Wallas H. S. Santos](#), [Isabela Chambers](#), [Emilio Brazil](#) and [Marcio Moreno](#)
Drafting interpretation of Seismic Data through Virtual Reality with Hyperknowledge Base Systems

15:00 [Xianglong Feng](#), [Zeyang Bao](#) and [Sheng Wei](#)
Exploring CNN-based Viewport Prediction For Live Virtual Reality Streaming

15:00 [Kunihiko Sato](#)
Extracting Specific Voice from Mixed Audio Source

15:00 [Adam Streck](#), [Philipp Stepnicka](#), [Jens Klaubert](#) and [Thomas Wolbers](#)
neomento - VR treatment for social anxiety disorder

15:00 [Abdelkader Bellarbi](#), [Jean-Pierre Jessel](#) and [Laurent Da Dalto](#)
Towards Method Time Measurement Identification Using Virtual Reality and Gesture Recognition

15:00 [Yu-Wei Wang](#), [Tse-Yu Pan](#), [Yung-Ju Chang](#) and [Min-Chun Hu](#)
Vibration Feedback Controlled by Intuitive Pressing in VR Sports Training

15:00 [Andreas Luxenburger](#), [Jonas Mohr](#), [Torsten Spieldenner](#), [Dieter Merkel](#), [Fabio Espinosa](#), [Florian Reinicke](#), [Julian Ahlers](#), [Markus Stoyke](#) and [Tim Schwartz](#)
Extended Abstract: Augmented Reality for Human-Robot Cooperation in Aircraft Assembly

15:00 [The Vinh Nguyen](#) and [Tommy Dang](#)
VRrescuer: A Virtual Reality Application for Disaster Response Training

15:00 [Daniel Hawes](#), [Rob Teather](#), [Ali Arya](#) and [Max Krichenbauer](#)
Comparing the Value of 3D Software Experience with Camera Layout in Virtual Reality

15:00 [Vishnunarayan Girishan Prabhu](#), [Courtney Linder](#), [Laura Stanley](#) and [Robert Morgan](#)
An Affective Computing in Virtual Reality Environments for Managing Surgical Pain and Anxiety

15:00 [Helen Trejo](#)
Creating an Immersed Sheep and Wool VR/AI Experience

15:00 [Alberto Santamaria-Pang](#), [Chinmaya Devaraj](#), [James Kubricht](#), [Aritra Chowdhury](#) and [Peter Tu](#)
Towards Semantic Action Analysis via Emergent Language

15:00 [Amit Ahire](#)
AR Tracking with Hybrid, Agnostic And Browser Based Approach

15:00 [Chang-De Lin](#), [Jung-Hua Wang](#), [Chun-Shun Tseng](#), [Shan-Chun Tsai](#), [Chiao-Wei Lin](#) and [Ren-Jie Huang](#)
Binarization Using Morphological Decomposition Followed by GMM or cGAN

15:00 [Yuan Tian](#) and [Marc Compere](#)
A Case Study on Visual-Inertial Odometry using Supervised, Semi-supervised and Unsupervised learning methods

15:00 [Pierre-Olivier Pigny](#) and [Lionel Dominjon](#)
Using CNNs for Users Segmentation in Video See-Through Augmented Virtuality

15:00 [Mengyi Zhao](#) and [Shuling Dai](#)
Intent Inference of Human Hand Motion for Haptic Feedback Systems

- 15:00 [The Vinh Nguyen](#) and [Tommy Dang](#)
DRONEVR: A virtual reality simulator for DroneOperator
- 15:00 [The Vinh Nguyen](#), [Kwanghee Jung](#) and [Tommy Dang](#)
Creating Virtual Reality and Augmented Reality development in classroom: Is it a hype?
- 15:00 [Ashwin Ajit Et Al.](#)
Realtime Behavior-Based Continual Authentication of Users in Virtual Reality Environments
- 15:00 [Zhenjie Zhao](#)
Live Emoji: A Live Storytelling VR System with Programmable Cartoon-style Emotion Embodiment
- 15:00 [Vuthea Chheang Et Al.](#)
An Interactive Demonstration of Collaborative VR for Laparoscopic Liver Surgery Training
- 15:00 [Nadine Meissler Et Al.](#)
Explore Convolutional Neural Networks in Virtual Reality
- 15:00 [Alisha Sharam Et Al.](#)
Unsupervised Learning of Depth and Ego-Motion from Cylindrical Panoramic Video

18:30-21:00 Banquet & best paper awards

Wednesday, December 11th (preliminary program, changes may still apply)

07:30-08:30 Breakfast (included in registration)

07:30-17:00 Registration

08:30-09:30 Session 11: Keynote

08:30 [Paul Conoval](#)
TBD

09:30-09:50 Coffee break

09:50-11:30 Session 12: Paper presentations (full papers)

09:50 [Kangsoo Kim](#), [Nahal Norouzi](#), [Tiffany Losekamp](#), [Gerd Bruder](#), [Mindi Anderson](#) and [Gregory Welch](#)
The Effects of Assistant Agency and Embodiment on User Perception in Smart Patient Care Environments

10:15 [Vuthea Chheang](#), [Patrick Saalfeld](#), [Tobias Huber](#), [Florentine Huettl](#), [Werner Kneist](#), [Bernhard Preim](#) and [Christian Hansen](#)
Collaborative Virtual Reality for Laparoscopic Liver Surgery Training

10:40 [Ryo Takizawa](#), [Adrien Verhulst](#), [Katie Seaborn](#), [Masaaki Fukuoka](#), [Atsushi Hiyama](#), [Michiteru Kitazaki](#), [Masahiko Inami](#) and [Maki Sugimoto](#)
Exploring Perspective Dependency in a Shared Body with Virtual Supernumerary Robotic Arms

11:05 [Atiqul Islam](#), [Jinshuai Ma](#), [Tom Gedeon](#), [Md Zakir Hossain](#) and [Ying-Hsang Liu](#)
Measuring User Responses to Driving Simulators: A Galvanic Skin Response Based Study

11:30-12:30 Session 13: Keynote

11:30 [Tobias Höllerer](#)
TBD

12:30-14:00 Lunch (on your own)

14:00-15:45 Session 14A: Special session "Immersive Analytics"

- [Andreas Knote](#), [Sabine C. Fischer](#), [Sylvain Cussat-Blanc](#), [Florian Niebling](#), [David Bernard](#), [Florian Cogoni](#)
14:00 and [Sebastian von Mammen](#)
Immersive Analysis of 3D Multi-Cellular In-Vitro and In-Silico Cell Cultures
- 14:25 [Johannes Sorger](#), [Manuela Waldner](#), [Wolfgang Knecht](#) and [Alessio Arleo](#)
Immersive Analytics of Large Dynamic Networks via Overview and Detail Navigation
- [Nadine Meissler](#), [Annika Wohlan](#), [Nico Hochgeschwender](#) and [Andreas Schreiber](#)
14:50 Using Visualization of Convolutional Neural Networks in Virtual Reality for Machine Learning Newcomers
- [Aashiq Shaikh](#), [Linda Nguyen](#), [Alireza Bahreman](#), [Hannah Bartolomea](#), [Frank Liu](#), [Van Nguyen](#), [Derrick Anderson](#) and [Robert Likamwa](#)
15:15 Coordinate: A spreadsheet-programmable augmented reality framework for immersive map-based visualizations
- 15:30 [Ghazaleh Tanhaei](#), [Lynda Hardman](#) and [Wolfgang Hürst](#)
DatAR: Your Brain, your Data, on your Desk - A Research Proposal

14:00-15:45 Session 14B: Workshop MARCH (part 1)

15:45-16:15 Coffee break

16:15-18:00 Session 15A: Special session "VR applications & experiences"

- 16:15 [Zhenjie Zhao](#), [Feng Han](#) and [Xiaojuan Ma](#)
A Live Storytelling Virtual Reality System with Programmable Cartoon-style Emotion Embodiment
- [Luis Quintero](#), [John E. Muñoz](#) and [Panagiotis Papapetrou](#)
16:40 Open-Source Physiological Computing Framework for Mobile Virtual Reality and Heart Rate Variability Biofeedback
- 17:05 [John Edison Munoz Cardona](#), [Shi Cao](#) and [Jennifer Boger](#)
Kinematically Adaptive Exergames: Personalizing Exercise Therapy Through Closed-Loop Systems
- 17:30 [Panote Siriaraya](#), [Kiri Takumi](#), [Yukiko Kawai](#) and [Shinsuke Nakajima](#)
A Book Without Pages: Developing an Augmented Reality Storyteller based on Open Web Data

16:15-18:00 Session 15B: Workshop MARCH (part 2)