

**IEEE VR/AR Advisory Board**  
**Industry Connections Activity Initiation Document (ICAID)**  
**Version: 2.0, 9 October 2019**

IC17-018-02 Approved by the IEEE-SASB 7 November 2019

### **Instructions**

- Instructions on how to fill out this form are shown in red. It is recommended to leave the instructions in the final document and simply add the requested information where indicated.
- **Shaded Text** indicates a placeholder that should be replaced with information specific to this ICAID, and the shading removed.
- Completed forms, in Word format, or any questions should be sent to the IEEE Standards Association (IEEE-SA) Industry Connections Committee (ICCom) Administrator at the following address: [industryconnections@ieee.org](mailto:industryconnections@ieee.org).
- The version number above, along with the date, may be used by the submitter to distinguish successive updates of this document. A separate, unique Industry Connections (IC) Activity Number will be assigned when the document is submitted to the ICCom Administrator.

### **1. Contact**

Provide the name and contact information of the primary contact person for this IC activity. Affiliation is any entity that provides the person financial or other substantive support, for which the person may feel an obligation. If necessary, a second/alternate contact person's information may also be provided.

**Name:** Yu Yuan

**Email Address:** y.yuan@ieee.org

**Employer:** 0xSenses Corporation

**Affiliation:** 0xSenses Corporation

IEEE collects personal data on this form, which is made publicly available, to allow communication by materially interested parties and with Sponsors and Activity officers who are responsible for IEEE work items.

### **2. Participation and Voting Model**

Specify whether this activity will be entity-based (participants are entities, which may have multiple representatives, one-entity-one-vote), or individual-based (participants represent themselves, one-person-one-vote).

Individual-Based

### **3. Purpose**

#### **3.1. Motivation and Goal**

Briefly explain the context and motivation for starting this IC activity, and the overall purpose or goal to be accomplished.

Thanks to the rapid growth of the Virtual Reality (VR), Augmented Reality (AR) and Mixed Reality (MR) industry, IEEE VR/AR Working Group has attracted hundreds of experts from all over the world. As the Working Group is an Entity-Based group, there have been many discussions and strong interests to form an Individual-Based group to encourage and accommodate a wider participation.

IEEE VR/AR Advisory Board, as the long-anticipated Individual-Based group, will provide advice, proposals and other inputs for IEEE VR/AR Working Group.

IEEE VR/AR Advisory Board will also serve as an ideal home for other work items (e.g. white papers, events) while IEEE VR/AR Working Group will focus on standards development.

#### **3.2. Related Work**

Provide a brief comparison of this activity to existing, related efforts or standards of which you are aware (industry associations, consortia, standardization activities, etc.).

IEEE VR/AR Working Group (IEEE P2048 standards family) which is an Entity-Based group.

#### **3.3. Previously Published Material**

Provide a list of any known previously published material intended for inclusion in the proposed deliverables of this activity.

N/A

#### **3.4. Potential Markets Served**

Indicate the main beneficiaries of this work, and what the potential impact might be.

This work will serve and benefit device manufacturers, content providers, service providers, technology developers, government agencies, end users and other parties that are relevant to Virtual Reality (VR), Augmented Reality (AR) and Mixed Reality (MR).

#### **3.5. How will the activity benefit the IEEE?**

This activity will proactively support IEEE standards development for Virtual Reality (VR), Augmented Reality (AR), Mixed Reality (MR), and other relevant technologies. It will help IEEE and IEEE SA establish or enhance leadership in relevant industry sectors. It will also help IEEE and IEEE SA grow membership (individual/corporate) and influence globally.

#### **4. Estimated Timeframe**

Indicate approximately how long you expect this activity to operate to achieve its proposed results (e.g., time to completion of all deliverables).

**Expected Completion Date:** 12/2021

IC activities are chartered for two years at a time. Activities are eligible for extension upon request and review by ICCom and the IEEE-SA Standards Board. Should an extension be required, please notify the ICCom Administrator prior to the two-year mark.

#### **5. Proposed Deliverables**

Outline the anticipated deliverables and output from this IC activity, such as documents (e.g., white papers, reports), proposals for standards, conferences and workshops, databases, computer code, etc., and indicate the expected timeframe for each.

Documents (e.g., white papers, reports), including but not limited to:

- IEEE VR/AR Technology Outlook

Proposals for standards, including but not limited to:

- New PARs for IEEE VR/AR Working Group and IEEE P2048 standards family

Conferences, workshops, challenges and competitions, including but not limited to:

- Global VR/AR Innovation Challenge

#### **6. Funding Requirements**

Outline any contracted services or other expenses that are currently anticipated, beyond the basic support services provided to all IC activities. Indicate how those funds are expected to be obtained (e.g., through participant fees, sponsorships, government or other grants, etc.). Activities needing substantial funding may require additional reviews and approvals beyond ICCom.

Anticipated expenses include but are not limited to marketing, legal, finance, travel, public events, group meetings and other general and administrative overhead.

The initial funds are expected to come from external sponsorship, donations and grants.

#### **7. Management and Procedures**

##### **7.1. IEEE Sponsoring Committee**

Indicate whether an IEEE sponsoring committee of some form (e.g., an IEEE Standards Sponsor) has agreed to oversee this activity and its procedures.

**Has an IEEE sponsoring committee agreed to oversee this activity?:** No

If yes, indicate the sponsoring committee's name and its chair's contact information.

**Sponsoring Committee Name:** Committee Name

**Chair's Name:** Full Name

**Chair's Email Address:** who@where

**Chair's Phone:** Number, including country code

Additional sponsoring committee information, if any.

## **7.2. Activity Management**

If no IEEE sponsoring committee has been identified in 7.1 above, indicate how this activity will manage itself on a day-to-day basis (e.g., executive committee, officers, etc).

This group will be governed by an executive committee consisting of a chair and other officers as needed. The first chair will be Yu Yuan.

## **7.3. Procedures**

Indicate what documented procedures will be used to guide the operations of this activity; either (a) modified baseline *Industry Connections Activity Policies and Procedures*, (b) Sponsor policies and procedures accepted by the IEEE-SA Standards Board, or (c) Working Group policies and procedures accepted by the Working Group's Sponsor. If option (a) is chosen, then ICom review and approval of the P&P is required. If option (b) or (c) is chosen, then ICom approval of the use of the P&P is required.

(a) modified baseline *Industry Connections Activity Policies and Procedures*

## **8. Participants**

### **8.1. Stakeholder Communities**

Indicate the stakeholder communities (the types of companies or other entities, or the different groups of individuals) that are expected to be interested in this IC activity, and will be invited to participate.

Device manufacturers, content providers, service providers, technology developers, government agencies, end users and other parties that are relevant to Virtual Reality (VR), Augmented Reality (AR) and Mixed Reality (MR)

### **8.2. Expected Number of Participants**

Indicate the approximate number of entities (if entity-based) or individuals (if individual-based) expected to be actively involved in this activity.

100

### **8.3. Initial Participants**

Provide a list of the entities or individuals that will be participating from the outset. It is recommended there be at least three initial participants for an entity-based activity, or five initial participants (each with a different affiliation) for an individual-based activity.

Use the following table for an entity-based activity:

<b>Entity</b>	<b>Primary Contact</b>	<b>Additional Representatives</b>
Entity Name	Contact Name Email Address Phone Number	Name, Email Address Name, Email Address

Use the following table for an individual-based activity:

<b>Individual</b>	<b>Employer</b>	<b>Affiliation</b>
Yu Yuan	OxSenses Corporation	OxSenses Corporation
Ferhan Ozkan	VR First	VR First; Dreamreality
Steve Mann	University of Toronto	MannLab
Shannon Norrell	HP	HP
Stephen Dukes	Dreamerse Inc.	Dreamerse Inc.
Geoffrey Hamon	howest, Hogeschool West- Vlaanderen	howest, Hogeschool West- Vlaanderen
Diego Liberati	National Research Council of Italy	National Research Council of Italy
Chintan Oza	Tata Communications Ltd.	IEEE Bombay Section
David Goldman	Lumus	Lumus
Fridolin Wild	Oxford Brookes University, UK	IEEE P1589 WG
Jerri Lynn Hogg	Fielding Graduate University	Fielding Graduate University; Self
Bhanwar Lal Bishnoi	Larsen & Toubro Ltd.	Larsen & Toubro Ltd.
Charles Brooks	Brooks Consulting International	Brooks Consulting International
Felix Abad Guerra Pachur	Schneider Electric	Schneider Electric
Marsha Maxwell	Atlanta International School	Atlanta International School
Tom Coughlin	Coughlin Associates, Inc.	Coughlin Associates, Inc.
Renato Opice Blum	Opice Blum, Bruno, Abrusio e Vainzof Advogados Associados	Insper University
William T. Hayes	Iowa Public Television	Iowa Public Television
Steven Aukstakalnis	Matrix Technical Services	Matrix Technical Services
Bradley Hefta- Gaub	High Fidelity	High Fidelity
Jodi Schiller	New Reality Arts	New Reality Arts
Vaneet Aggarwal	Purdue University	Purdue University
John A. Rupkalvis	StereoScope International	StereoScope International

Joaquim Armando Pires Jorge	The University of Lisboa, PORTUGAL	ACM SIGGRAPH; INESC-ID
AJ Burke	KESE LLC	Space Pioneers
Patrick Seeling	Central Michigan University	Central Michigan University
Vangelis Lympouridis	EnosisVR	University Southern California
Touradj Ebrahimi	Swiss Federal Institute of Technology in Lausanne - EPFL	Swiss Federal Institute of Technology in Lausanne - EPFL
Pradeep Balachandran	Self	IEEE P2650 WG
Dirk Behrens	Dresden Microdisplay GmbH	Dresden Microdisplay GmbH
Jonathan Paff	Virtual World Society; RATLab LLC	Virtual World Society; RATLab LLC
Jannick P. Rolland	University of Rochester	University of Rochester
Craig James	CSIRO	CSIRO
Kim Shiho	Yonsei University	Yonsei University
Dhananjay Singh	Hankuk University of Foreign Studies (HUFS), South Korea	Hankuk University of Foreign Studies (HUFS), South Korea
Gregory Maltz	American Academy of Ophthalmology	TelepathEye Inc.
Steven Feiner	Columbia University	Columbia University