|  |  |
| --- | --- |
| Project | **Cybersickness Reduction Working Group**  < <https://sagroups.ieee.org/3079/> **>** |
| Title | **Proposal of New PAR for ‘** **Framework for Evaluating the Quality of Digital Human’** |
| DCN | **3079-21-0052-02-0000** |
| Date Submitted | **July 22, 2021** |
| Source(s) | **Seung Wook Lee** [tajinet@etri.re.kr](mailto:tajinet@etri.re.kr) **(ETRI)**  **Andrew Min-gyu Han** andyhan@hansung.ac.kr **(Hansung Univ.)**  **Sangkwon Peter** **Jeong** [ceo@joyfun.kr](mailto:ceo@joyfun.kr) **(JoyFun Inc.)** |
| Re: |  |
| Abstract | This document is a description of a new PAR to propose a framework for evaluating the quality of digital human. |
| Purpose | This document is submitted to propose a new PAR. |
| Notice | This document is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein. |
| Release | The contributor grants a free, irrevocable license to the IEEE to incorporate material contained in this contribution, and any modifications thereof, in the creation of an IEEE Standards publication; to copyright in the IEEE’s name any IEEE Standards publication even though it may include portions of this contribution; and at the IEEE’s sole discretion to permit others to reproduce in whole or in part the resulting IEEE Standards publication. The contributor also acknowledges and accepts that IEEE 3079 may make this contribution public. |
| Patent Policy | The contributor is familiar with IEEE patent policy, as stated in [Section 6 of the IEEE-SA Standards Board bylaws](http://standards.ieee.org/guides/opman/sect6.html#6.3) <[http://standards.ieee.org/guides/bylaws/sect6-7.html#6](http://127.0.0.1:4664/cache?event_id=757737&schema_id=1&s=5X0vID10lu_E6yrIkWkNd4Wz2H8&q=hancock)> and in *Understanding Patent Issues During IEEE Standards Development* <http://standards.ieee.org/board/pat/faq.pdf> |

**–**

**PAR for a New IEEE Standard**

# Section 1

* 1. **Assigned Project Number**:

P3079.3

* 1. **Type of Document: *Standard, Recommended Practice, or Guide***

Standard

* 1. **Life Cycle: *Full Use or Trial Use***

Full Use.

# Section 2

**2.1 Project Title:**

# Framework for Evaluating the Quality of Digital Human

# Section 3

**3.1 Working Group: Human Factor for Immersive Contents Working Group (C/SAB/3079\_WG)**

**3.1.1 Contact Information for Working Group Cahir:**

**Name:** Beom-Ryeol Lee

**Email Address:** lbr@etri.re.kr

**3.1.2 Contact Information for Working Group Vice Cahir:**

**Name:** Wookho Son

**Email Address:** whson@etri.re.kr

**3.2 Society and Committee:** C/SAB

**3.2.1 Contact Information for Standards Committee Cahir:**

**Name:** Robby Robson

**Email Address:** robby@computer.org

**3.2.2 Contact Information for Standards Committee Vice Cahir:**

None

**3.2.3 Contact Information for Standards Representative:**

None

**3.3 Joint Sponsor:** (chosen from drop down menu)

If you are not adding a joint sponsor to this project, you may leave this field blank.

# Section 4

**4.1 Sponsor Balloting Information: *Individual or Entity***

Individual

**4.2 Expected Date of Submission of Draft to the IEEE-SA for Initial Standards Committee Ballot:**

**Month: Oct. Year: 2022**

**4.3 Projected Completion Date for Submittal to RevCom**

**Month: Aug. Year: 2023**

# Section 5

**5.1 Approximate number of people expected to be actively involved in the development of this project:**

30

**5.2 Scope of the proposed standard:**

This standard is intended to provide a standard framework for evaluating the quality of digital human.

This is related to the human factor for immersive content service that defines metrics for evaluating the realism of digital human

This framework includes the following;

* A set of cognitive-psychological factors that defines how users feel the realism of digital human.
* Definitions on metadata that describe the quality of digital human.
* A procedure that allows the quality evaluation of digital human.

**5.3 Is the completion of this standard contingent upon the completion of another standard?** No

**5.4 Will this document contain a Purpose clause?**

This document will not include a purpose clause.

**5.5 Need for the project:**

Immersive contents are widely used, and the metaverse service is getting popular nowadays. To support the growth of XR and metaverse applications, the digital human is one of the essential technology, and its quality is an important element.

In some applications such as a virtual doctor, the realism of digital human is very important factor for the service quality. To provide and check the realism of digital human, a common quality evaluation standard for digital human should be developed.

**5.6 Stakeholders for the standard:**

Content Providers, Manufacturers, Local Governments, Constructors

# Section 6

**6.1 Intellectual Property:**

**A. Is the Sponsor aware of any copyright permissions needed for this project? *No***

**B. Is the Sponsor aware of possible registration activity related to this project? *No***

# Section 7

**7.1 Are there other standards or projects with a similar scope? *No***

**7.2 Joint Development - Is it the intent to develop this document jointly with another organization? *No***

**7.3 International Standards Activities**

**A. Adoptions - Is there potential for this standard to be adopted by another organization? *No***

**B. Harmonization - Are you aware of another organization that may be interested in portions of this document in their standardization development efforts?**  ***No***

**7.4 Does the sponsor foresee a longer term need for testing and/or certification services to assure conformity to the standard? *Yes***

**Additionally, is it anticipated that testing methodologies will be specified in the standard to assure consistency in evaluating conformance to the criteria specified in the standard? *No***

# Section 8

**8.1 Additional Explanatory Notes:**

**8.2 IEEE Code of Ethics**

**I acknowledge that I have read and I understand the** [**IEEE Code of Ethics**](http://www.ieee.org/portal/pages/iportals/aboutus/ethics/code.html)

**I agree to conduct myself in a manner that adheres to the IEEE Code of Ethics when engaged in official IEEE business.**