## Eighteenth International Conference on Advances in Computer-Human Interactions (ACHI 2025)

Held at DigitalWorld 2025

Nice, France 18-22 May 2025

**Editors:** 

Weizhi Meng

ISBN: 979-8-3313-2076-8

## Printed from e-media with permission by:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2025) by International Academy, Research, and Industry Association (IARIA) Please refer to the Copyright Information page.

Printed with permission by Curran Associates, Inc. (2025)

International Academy, Research, and Industry Association (IARIA) 412 Derby Way Wilmington, DE 19810

Phone: (408) 893-6407 Fax: (408) 527-6351

petre@iaria.org

## Additional copies of this publication are available from:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571 USA

Phone: 845-758-0400 Fax: 845-758-2633

Email: curran@proceedings.com Web: www.proceedings.com

## **Table of Contents**

Psychological Modelling and Action Recognition for Boxing Performance  Vishal Ravishankar, Itish Shukla, Nishat Afroz, Anirudh Bhatta, and Surbhi Choudhary	1
From Tables to 3D-Models: Improving the Usability of Scientific Data Visualization Dennis Marschall, Michael Butzek, Nikolaos Margaritis, and Ghaleb Natour	9
Improving Continuous Japanese Fingerspelling Recognition with Transformers: A Comparative Study against CNN-LSTM Hybrids  Akihisa Shitara and Yuhki Shiraishi	13
CoMeSy: Multimodal Interaction with a Situated Cobot for Collaborative Tasks  Sven Milde, Alexander Jost, Rainer Blum, Jan-Torsten Milde, Marius Schultheis, Johannes Weyel, Tobias Muller,  Thies Beinke, Niklas Schreiner, Julian Heumuller, Dennis Moller, and Frank Hartman	20
Vision-Controlled Hand Gesture Recognition System for Home Automation  Luis Gilberto Rangel Perez, Rodolfo Omar Dominguez Garcia, Miriam Gonzalez Duenas, and Miguel Angel de la  Torre Gomora	25
Ethical Risk Assessment of AI in Practice Methodology: Process-oriented Lessons Learnt from the Initial Phase of Collaborative Development with Public and Private Organisations in Norway  Natalia Murashova, Diana (Saplacan) Lindblom, Aida Omerovic, Heidi E. I. Dahl, and Leonora Onarheim  Bergsjo	33