ACHI 2025

The Eighteenth International Conference on Advances in Computer-Human Interactions

May 18 - 22, 2025

Nice, France

ACHI 2025 Editors

Weizhi Meng, Lancaster University, UK

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 1
Vishal Ravishankar, Itish Shukla, Nishat Afroz, Anirudh Bhatta, and Surbhi Choudhary

From Tables to 3D-Models: Improving the Usability of Scientific Data Visualization 9
Dennis Marschall, Michael Butzek, Nikolaos Margaritis, and Ghaleb Natour

Improving Continuous Japanese Fingerspelling Recognition with Transformers: A Comparative Study against CNN-LSTM Hybrids 13
Akihisa Shitara and Yuhki Shiraishi

CoMeSy: Multimodal Interaction with a Situated Cobot for Collaborative Tasks 20
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

Vision-Controlled Hand Gesture Recognition System for Home Automation 25
Luis Gilberto Rangel Perez, Rodolfo Omar Dominguez Garcia, Miriam Gonzalez Duenas, and Miguel Angel de la Torre Gomora

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 33
Natalia Murashova, Diana (Saplacan) Lindblom, Aida Omerovic, Heidi E. I. Dahl, and Leonora Onarheim Bergsjo