

## HCI International 2025 22 - 27 June 2025

Gothia Towers Hotel and Swedish Exhibition & Congress Centre, Gothenburg, Sweden

### **AI-HCI 2025**

# 6TH INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE IN HCI

Jointly held under one management and one registration with HCI International 2025

#### https://2025.hci.international/ai-hci

#### Chairs

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The AI in HCI conference aims to bring together academics, practitioners and students to exchange results from academic and industrial research, as well as industrial experiences, on the use of Artificial Intelligence technologies to enhance Human-Computer Interaction. In particular, the following areas of research are relevant: (i) Ethical and trustworthy AI to provide a fair and unbiased experience; (ii) Evolution of Human-Centered AI including models, processes and modalities; (iii) Generative AI tools, methods, and processes; (iv) Human-AI Interaction and collaboration; (v) Human-centered AI/ML technologies; (vi) Use of AI to support basic human needs; and (vii) AI in HCI for consumer and industrial application domains; and. The conference is targeted at individuals and organizations who have performed research or developed applications in the area of AI in HCI. The conference is also targeted at individuals and organizations which want to learn from those results, so they can (re-)use them in research or industrial applications.

#### The AI in HCI Conference welcomes work with a strong user, human, or society focus. The related topics include, but are not limited to:

- Ethical and trustworthy Al
  - Identifying and addressing biases and potential conflicts such as fairness, privacy, equity, diversity, sustainability, power assignment and distribution, norms, values / beliefs
  - o Explainable AI, transparency, reliability, trust, and fairness
  - o Metrics and Key Performance Indicators (KPIs)
- Human-Centered Al
  - Models: human modeling, social models, dialog / interaction models, technology models
  - Processes, tools, methods, standards, multi-disciplinary collaboration
  - o Design thinking: methods, processes, tools, and case studies
  - Data management: data selection, data generation, data quality, data annotation, training data, testing data
  - o Prototyping / simulation
  - o Personalizable and adaptable User Interfaces, Intelligent User Interfaces, affective User Interfaces
  - User involvement, user research, evaluation, AI technology assessment and customization
- Generative Al
  - Al-based content generation, such as text, images, videos, 3D models, etc.
  - control of outcomes, prompt engineering, bias, hallucinations, etc.
  - Generation of process artifacts, such as definition of user goals, user models, personas / user roles, usability test results, storytelling and narratives, etc.
  - Generative UI/UX: UI design, personalized UIs, collaborative creativity
- Human-Al Interaction
  - Conversational modalities, such as chatbots and intelligent personal assistants
  - o Human-robot teaming and interactions
  - o Human-agent collaboration and interactions
  - Interaction paradigms: gesture-based interactions, implicit interactions, virtual and augmented reality, speech-based interaction, brain-computer interfaces, natural language interaction
- Human-centered AI/ML technologies
  - Visualizations of ML model results and properties: explaining decision-making processes of ML models, feature selection and extraction techniques, transparent and interpretable visualization of ensemble methods, model's uncertainty and risk assessment
  - o Visual interactive AI/ML model discovery

- o Investigation of the trade-offs between model complexity and interpretability
- o Lossless visualization on AI/ML high-dimensional data
- Interactive ML algorithms for high stakes AI/ML tasks with humanin-the-loop
- o Methods to counter quasi-explanations of AI/ML models
- o Robust, safe, and secure ML technologies
- o ML life cycle / ML operations (MLOps)
- Use of AI to support fundamental human needs, such as
  - Fair supply of and access to healthy and affordable food and water
  - Fair supply of and access to affordable education and personal growth
  - o Fair supply of and access to affordable healthcare
  - o Sustainable use of resources
  - Being treated respectfully and fairly without bias and discrimination
  - Increasing inclusion and reducing inequalities
  - Fostering environmental sustainability, responsible consumption, and production
- Consumer and industrial application domains
  - Healthcare and well-being: diagnostics support, treatment suggestions including explainability, evidence and confidence, ehealth, personalized healthcare, e-loT, social assistive robots
  - Cultural and art applications: writing, painting, drawing, composing, etc.,
  - Financial applications: trends, predictions, bids, risk assessments, recommendations
  - o Market places: match finding, trending, bidding, offering
  - Manufacturing and robots: human-robot teaming, human-robot interaction, safety, factory automation and optimization, digital twins, simulations, etc.
  - (Semi-) Autonomous transportation: monitoring and control, explainability, evidence and confidence, ethical conflict resolution, safety, social navigation
  - Smart dashboards: status, deviations, recommendations for preventive and corrective actions including explainability, evidence and confidence
  - Personalized education and e-learning: assessment, planning, content selection, progress measurements
  - Security: predicting and identifying vulnerabilities, predicting and suggesting mitigations, selecting and executing mitigations, monitoring incidents, penetration testing, digital forensics

Conference proceedings published by



Submission deadlines are available at the HCII 2025 website:

https://2025.hci.international/submissions.html