



# AI-HCI 2024

## 5TH INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE IN HCI

Jointly held under one management and one registration with HCI International 2024

<https://2024.hci.international/ai-hci>

### HCI International 2024

29 June - 4 July 2024  
Washington Hilton Hotel,  
Washington DC, USA

### Chairs

**Helmut Degen** ([helmut.degen@siemens.com](mailto:helmut.degen@siemens.com))  
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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) Use of AI to support basic human needs; and (vi) AI in HCI for consumer and industrial application domains.

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 focus. The related topics include, but are not limited to:

- Ethical and trustworthy AI
  - Identifying and addressing biases and potential conflicts such as fairness, privacy, equity, diversity, sustainability, power assignment and distribution, norms, values / beliefs
  - Explainable AI, transparency, reliability, trust, and fairness
  - Metrics and Key Performance Indicators (KPIs)
- Human-Centered AI
  - Models: human modeling, social models, dialog / interaction models, technology models
  - Processes, tools, methods, standards, multi-disciplinary collaboration
  - Data acquisition and data quality
  - Prototyping / simulation
  - Personalizable and adaptable User Interfaces, Intelligent User Interfaces, affective User Interfaces
  - User involvement, user research, evaluation, AI technology assessment and customization
- Generative AI
  - AI-based content generation, such as text, images, videos, 3D models, etc.
  - For Large Language Models (LLMs): control of outcomes, prompts, 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-AI Interaction
  - Conversational modalities, such as chatbots and intelligent personal assistants
  - Human-robot teaming and interactions
  - Human-agent collaboration and interactions
  - Interaction paradigms: gesture-based interactions, implicit interactions, virtual and augmented reality, brain-computer interfaces
- 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
  - Fair supply of and access to affordable healthcare
  - 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 incl. explainability, evidence and confidence, e-health, personalized healthcare, e-IoT, social assistive robots
  - Cultural and art applications: writing, painting, drawing, composing, etc., Financial applications: trends, predictions, bids, risk assessments, recommendations
  - Market places: match finding, trending, bidding, offering
  - Manufacturing & 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 2024 website:

<http://2024.hci.international/submissions>