



# The Handbook of Formal Methods in Human-Computer Interaction [

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Monografía

This book provides a comprehensive collection of methods and approaches for using formal methods within Human-Computer Interaction (HCI) research, the use of which is a prerequisite for usability and user-experience (UX) when engineering interactive systems. World-leading researchers present methods, tools and techniques to design and develop reliable interactive systems, offering an extensive discussion of the current state-of-the-art with case studies which highlight relevant scenarios and topics in HCI as well as a presenting current trends and gaps in research and future opportunities and developments within this emerging field. The Handbook of Formal Methods in Human Computer Interaction is intended for HCI researchers and engineers of interactive systems interested in facilitating formal methods into their research or practical work

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Model (EOFM): A Task Analytic Modeling Formalism for Including Human -- Behavior in the Verification of Complex Systems -- The Specification and Analysis of Use Properties of a Nuclear -- Control System -- Formal Analysis of Multiple Coordinated HMI Systems -- Part IV: Future Opportunities and Developments -- Domain-Specific Modelling for Human-Computer Interaction -- Exploiting Action Theory as a Framework for Analysis and Design of Formal Methods Approaches: Application to the CIRCUS Integrated Development Environment -- A Public Tool Suite for Modelling Interactive Applications -- Formal Modeling of App-Ensembles -- Dealing with Faults during Operations: Beyond Classical Use of Formal Methods

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