

**“Call for Papers” (less than 1000 words)**

**User Interface Description Languages for Next Generation User Interfaces**

*A Special Issue of ACM Transactions on Computer-Human Interaction (TOCHI).*

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Deadline for Submissions: TBD

In the last decade, new classes of devices for accessing information have emerged along with increased connectivity. In parallel to the proliferation of these devices, new interaction styles have been explored. Among these new styles are virtual reality, mixed reality, 3D interaction, tangible user interfaces, context-aware interfaces and recognition-based interfaces. As a result of this increasing diversity of devices and interaction styles, developers of next-generation interfaces experience difficulties such as the lack of appropriate interaction abstractions, the need to create different design variations of a single user interface and the integration of novel hardware. As part of the user interface software research community effort to address these difficulties, the concept of a User Interface Description Language (UIDL), which has its foundations in user interface management systems and model-based authoring, has reemerged as a promising approach. UIDLs allow user interface designers to specify a user interface, using high-level constructs, which abstract away implementation details. UIDL specifications can then be automatically or semi automatically converted into concrete user interfaces or user interface implementations. Several UIDLs, mostly using XML as the general language, have been developed in recent years in order to simplify the development of next generation interfaces. However, many questions regarding the usefulness and effectiveness of UIDLs for next generation user interfaces remain open.

The aim of this Special Issue is to present high quality, original, manuscripts related to User Interface Description Languages for Next Generation User Interfaces. Manuscripts must be original, but significant expansions and revisions of papers recently presented at conferences and workshops will be considered. Possible topics include:

- Requirements for supporting the design and implementation of next generation user interfaces.
- Characteristics and comparison of interaction styles.
- Models for specifying the structure and behavior of next generation interfaces.
- Architectural frameworks for emerging interaction styles.
- Lessons learned from developing, evaluating and using particular UIDLs.

Deadline: The final manuscript is due TBD, but early submissions are encouraged.

All contributions will be rigorously peer reviewed to the usual exacting standards of TOCHI. Further information, including TOCHI submission procedures and advice on formatting and preparing your manuscript, can be found at: <http://www.acm.org/tochi/>

Manuscripts are actually submitted via the ACM online manuscript system at: <http://acm.manuscriptcentral.com/tochi/>

To discuss a possible contribution, please contact the special issue editors at TBD.