Artistic and research interests
As a human-centered design researcher Prof. Sawhney examines the critical role of technology, civic media, and urban interventions in contested spaces. He engages user experience design, participatory action research, sensory ethnography, and multi-modal (speech/audio) approaches for complex contexts of human-machine interaction. He has been conducting research at the intersection of AI and HCI for real-time news as well as humanitarian and crisis situations.
At Aalto University, Prof. Sawhney has embarked on a new research project on Reconstructing Crisis Narratives for Trustworthy Communication and Cooperative Agency. This research jointly conducted between Aalto University and THL proposes to analyze and reconstruct crisis narratives using mixed-methods, combining qualitative research for narrative inquiry with computational data analytics of crisis discourses in news and social media among diverse publics. The project plans to design tools and platforms representing and visualizing complex information to engage decision-makers, front-line responders, stakeholders, and the general public in making sense of crises and perceptions of risk and trust.

Projects
Reconstructing Crisis Narratives for Trustworthy Communication and Cooperative Agency
21/08/2020 → 30/11/2023

Research outputs
Augmented reality sandboxes: children's play and storytelling with mirror worlds

Invisible Lives, Visible Determination: Creative Agency as Resilience among Palestinian Children under Siege in Gaza

Te Awa Tupua: Sacred Rivers and Cooperative Urban AI Ecosystems

Ecologies of Contestation in Participatory Design

Cooperative Crisis Response among Emergency Responders & AI Systems

Zona Intervenida: Performance as Memory, Transforming Contested Spaces
Sawhney, N., 2019, Rethinking Peace: Discourse, Memory, Translation, and Dialogue.

Audio Journaling for Self-Reflection and Assessment among Teens in Participatory Media Programs
Civic Engagement through DIY Urbanism and Collective Networked Action

Guatemala Después: Rethinking the Past, Reimagining the Future
Acevedo, A. & Sawhney, N., 2015

Mobilizing Collective Urban Actions through MicroActs
Sawhney, N., de Klerk, C. & Malhotra, S., 2015, Civic Media Project. MIT Press Journals

Aago for Mobile Media Narratives Created by Teens: Lessons from Co-Design, Prototyping and Evaluation

Forward: International Conference on Interaction Design and Children (IDC 2013)
Hourcade, J. P., Sawhney, N. & Reardon, E. (eds.). ACM

Digital Technologies, Visual Research and the Non-Fiction Image

Making Sense of Participatory Video: Approaches for Participatory Content Analysis

New Directions in Participatory Video: Emerging Digital Technologies and Practices

Jerusalem and Belfast: Envisioning Media Arts for Cultural Identity and Urban Renewal in Divided Cities

Voices Beyond Walls: The Role of Digital Storytelling for Empowering Marginalized Youth in Refugee Camps

ThinkCycle: Supporting Open Source Collaboration and Sustainable Engineering Design in Education

Cooperative Innovation in the Commons: Rethinking Distributed Collaboration and Intellectual Property for Sustainable Design Innovation

ThinkCycle: Sharing Distributed Design Knowledge for Open Collaborative Design

Aware Community Portals: Shared Information Appliances for Transitional Spaces

Everywhere Messaging
Nomadic Radio: Speech and Audio Interaction for Contextual Messaging in Nomadic Environments

Nomadic Radio: Scaleable and Contextual Notification for Wearable Audio Messaging

Auditory Context Awareness via Wearable Computing

Speaking and Listening on the Run: Design for Wearable Audio Computing

Authoring and Navigating Video in Space and Time

Dynomite: A Dynamically Organized Ink and Audio Notebook

Merging the Benefits of Paper Notebooks with the Power of Computers in Dynomite

Nomadic Radio: A Spatialized Audio Environment for Wearable Computing

Teaching and Learning as Multimedia Authoring: The Classroom 2000 Project

Espace 2: an experimental hyperaudio environment

HyperCafe and the "Hypervideo Engine": A Generalized Approach for Hypervideo Authoring and Navigation

HyperCafe: Narrative and Aesthetic Properties of Hypervideo