URBAN ASSEMBLAGE: THE CITY AS ARCHITECTURE, MEDIA, AI AND BIG DATA.

• Paper / Proposal Title:
HereWeArt: Children’s Civic Engagement Through Augmented Reality Placemaking

• Author(s) Name:
Dr David Harris Smith, Harold Sikkema, Daven Bigelow, Calvin Hillis, Dr Brian Detlor, Dr Maureen Hupfer

• University or Company Affiliation:
McMaster University, Hamilton, Ontario, Canada

• Abstract (300 words):
We describe the motivations, theory, context, and realization of an augmented reality community art project that leverages geolocated media to engage children in civic life through storytelling and art making. HereWeArt (2018) is a smartphone app that combines AR and geolocation to position the artworks of children and youth as a site-specific public art exhibition. HereWeArt visualizes child-like wonder through creativity, while also raising questions of collaboration, youth civic engagement, and playing with ideas of sustainability in digital artwork. Geo-located AR art as a placemaking project amplifies the social and cultural contexts of a place. Engaging children in the initial creative process has important implications for cognitive development related to learning, creativity, and civic engagement. HereWeArt makes the most of these opportunities by involving children in civic engagement through inclusion of their creative artwork in a placemaking project. With reference to the notion of “placemaking” (LeFebvre 1991; Schneekloth, 1995), we consider how AR and geolocation amplify children’s voices in civic engagement. We offer a self-reflexive account of the development, production, and deployment of HereWeArt at an urban art festival. We find that including children’s voices in an AR placemaking project provides a variety of empowering narratives: initialization of youth civic engagement, raising agency of young
people, developing new associations with mobile devices, and new approaches to sustainable placemaking.

• Author(s) Biography (200 words each):

Dr David Harris Smith is an Associate Professor in the Department of Communication Studies and Multimedia at McMaster University. A humanist perspective on technology, the arts, and culture, frames his research. Dr Smith’s primary area of research is media and information arts – the intersection of arts, technology and science – including avatar virtual worlds, augmented and mixed reality environments, assistive media technologies for persons with disabilities, education and knowledge translation using virtual worlds, new media interaction and interface design, biometric and brain-computer interfaces, cognitive science of media, social robotics, and artificial intelligence. His cultural robotics project hitchBOT: The Hitchhiking Robot received extensive international media coverage. David teaches courses in coding, design, and new media arts.

Harold Sikkema is a Toronto based Visual Artist and Professor in the Faculty of Animation, Arts & Design at Sheridan College. His art practice integrates photographic, algorithmic, and networked approaches. His work attends to habits and patterns, reframing the everyday as strange. Harold is interested in emerging forms of digital collaboration and VR. As an educator, his primary focus is on integrated systems and interactive media. He also develops media arts programming for children and youth, through community arts organizations such as the Hamilton Conservatory for the Arts, and its charity, CKA.

Daven Bigelow is a published technical author, game developer with two shipped commercial titles, and is a self-taught Unity3D C# programmer with a keen interest in Augmented and Virtual Reality technologies. Daven graduated from McMaster University with a B.A. in Multimedia in 2018. He has worked on multiple projects as a Research Assistant under Dr. David Harris Smith at McMaster University including macGRID, VirtualHamilton, LRT Simulations, hitchBOT, Hammertown Adventure, QuestAR, HereWeArt, and more. His most recent work has been creating the freeware tool: Artspark. Artspark has multiple iterations that have been used by Culture for Kids in the Arts for public demonstrations of art made by local youths. Daven has designed Artspark to provide 3D and VR art-making and LUA interactivity sandbox tools in an accessible format that is tailored towards youths and non-programmer artists alike.

Calvin Hillis is a Master of Arts in Communication and New Media candidate at McMaster University. Calvin’s MA research is concerned with the role of personal content algorithms in social construction and identity development on social media. Calvin graduated from Ryerson University in 2019 with a B.A. in Sociology. Calvin has worked in the public and non-profit sectors in a variety of roles including project development and
implementation, program management, digital marketing, branding, and recruitment. Calvin’s work as an artist is concerned with creativity of the everyday, smartphone creativity for mental wellbeing, minimalist music production, and disc jockeying.

**Dr Brian Detlor** is Professor and Area Chair (Information Systems) at the DeGroote School of Business at McMaster University, Canada. He also is Visiting Professor at the Centre for Social Informatics, School of Computing at Edinburgh Napier University in Scotland. He currently serves as President of the Association of Information Science and Technology (ASIS&T). His research interests lie at the intersection of users, information, and information systems. His current research projects involve the investigation of digital literacy training programs led by public libraries and other local community organizations, as well as the use of digital storytelling by city cultural organizations. His research has been published in several leading Information Systems and Library & Information Science journals, including the *Journal of the Association for Information Science and Technology*, *Journal of Management Information Systems*, *Information Systems Journal*, *Government Information Quarterly*, and *College & Research Libraries*. More information about Dr. Detlor can be found at [https://www.degroote.mcmaster.ca/profiles/brian-detlor/](https://www.degroote.mcmaster.ca/profiles/brian-detlor/).

**Dr Maureen Hupfer’s** research interests include gender, self-concept and information processing, visual imagery in advertising, and marketing history. She teaches courses in Consumer Behaviour and Advertising and Promotion at both the undergraduate and graduate levels.