

Art Papers Jury

Shannon McMullen and **Fabian Winkler** engage issues in contemporary culture at the intersection of nature, technology and social inquiry through a practice they define as critical gardening. As interdisciplinary artists and cultural analysts, they combine their backgrounds in new media art and sociology to produce speculative social spaces and time-based installations. Their work has been shown internationally at venues such as Science Gallery, Dublin, Ireland; Art Center Nabi, Seoul, Korea; and ZKM Center for Art and Media, Karlsruhe, Germany. Winkler and McMullen are Associate Professors at Purdue University in West Lafayette, IN.

Anil Çamcı is an Assistant Professor of Performing Arts Technology at the University of Michigan. His work investigates new tools and theories for multimodal worldmaking across a variety of media ranging from electronic music to virtual reality. He has been featured in leading journals and conferences around the world. <www.anilcamci.com>

Haru Hyunkyung Ji is a media artist and co-creator of the research project “Artificial Nature,” exploring artificial life worldmaking. She holds a Ph.D. in Media Arts and Technology from UCSB and is an assistant professor in DPXA and the Digital Futures programs at OCAD University in Toronto, Canada.

Yoon Chung Han is an interdisciplinary artist and researcher. Her multi-disciplinary research interests range from data-driven design, interactive media arts and multimodal interaction using new media technologies. She received a Ph.D. at the Media Arts and Technology at UCSB and is currently an assistant professor at the California State University, Fullerton.

Graham Wakefield is an Assistant Professor of Computational Arts and a Canada Research Chair at York University, Toronto. He directs the Alice lab for Computational Worldmaking, whose research-creation program integrates AR/MR/VR with nature-inspired generative simulation and live coding toward worlds of open-ended creativity.

Daria Tsoupikova is an Associate Professor in the School of Design and the Electronic Visualization Laboratory at the University of Illinois at Chicago. Her research and artwork explore the art of virtual reality and computer graphics applications to educational multimedia and virtual rehabilitation for stroke survivors.

Everardo Reyes is Associate Professor in the Information Sciences Department at the Université Paris 8. He is a member of the Paragraphe Lab, a collaborator of the Cultural Analytics Lab and a board member of the International Association for Visual Semiotics. His research investigates relationships between humanities, the arts and computer sciences, particularly in visual form.

Robert Twomey is an artist and engineer exploring the poetic intersection of human and machine perception. He has several degrees, including a BS from Yale with majors in Art and Biomedical Engineering, an MFA in Visual Arts from the University of California, San Diego, and a PhD in Digital Arts and Experimental Media from the University of Washington. He is currently an Assistant Professor of Digital Media at Youngstown State University.

Art Papers External Reviewers

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Art Papers

Introducing the SIGGRAPH 2018 Art Papers

Angus G. Forbes

For ten consecutive years, ACM SIGGRAPH and Leonardo/ISAST have collaborated to publish this special issue of *Leonardo*, which this year showcases the Art Papers presented at SIGGRAPH 2018 in Vancouver, Canada. Fortuitously, it is the 50th anniversary of the founding of Leonardo by kinetic artist and astronautical pioneer Frank Malina, and this publication also commemorates the longevity of Leonardo and its continued impact in helping to foster a dynamic, international community of creative practitioners working at the intersections of art and technology.

The Art Papers track invites articles submitted in one of four categories—project description, theory/criticism, methods or history. This year we explicitly requested work in the project description category, introducing a new short papers track to encourage new ideas and innovative projects at different stages of development. We had an astounding number of submissions this year—well over 100 articles were submitted—and their overall excellence made it a challenge to determine the most worthy papers.

The Art Papers jury has expertise across a range of new media arts topics, including augmented and virtual reality, cultural heritage, ecological art, live coding, media archeology, data visualization, interactive design and robotics, among others. The rigorous reviewing process includes detailed feedback from jury members and external reviewers, a daylong jury meeting in which the top ranked papers are discussed at length, and a shepherding procedure that provides the authors with the opportunity to address reviewer concerns. Despite the varied topics, each of the 13 papers selected for journal publication presents an innovative project with a well communicated motivation for the relevance of the work and its impact on communities of practice and global culture. However, we also recognize that the final selection of papers cannot help but reflect the interests of the jury, and we further identified an additional 9 highly ranked submissions that are also very deserving of attention. These additional projects are featured in the SIGGRAPH Art & Design Posters track, and will be available online via the ACM Digital Library.

The use of contemporary technology to facilitate new forms of storytelling was at the forefront of this year's papers. "Holojam in Wonderland," by David Gochfeld, Clara Fernández-Vara, Corinne Brenner and Ken Perlin, defines a new artistic medium, Immersive Mixed Reality Theater, and introduces a compelling project based on Lewis Carroll's *Alice in Wonderland*. In "Alienating the Familiar with CGI," Paul Charisse and Alex Counsell describe their creative and technical process in developing the award-winning *Uncle Griot*, an "art house" film that makes use of big-budget animation techniques.

A series of papers describe creative projects that investigate new media as a means to interrogate complex systems. The *Diastrophisms* sound installation, presented by Nicole L'Huillier and Valentina Montero, explores poetical and political issues related to the destruction of the Alto Río building during the 2010 Chilean earthquake, highlighting the transformation dynamics between nature and culture. Haru Hyunkyung Ji and Graham Wakefield introduce their mixed-reality artwork, *Inhabitat*, in which participants become part of an imaginary ecology, interacting within the complex interconnectivity of an artificial nature.

Cultural heritage is a pervasive theme in this year's Art Papers. Todd Berreth's "Cop to Conductor" explores the role of the public monument and introduces strategies for remediating monuments for contemporary cultural interventions. Nicolas Henchoz and Allison Crank introduce a series of Jazz Heritage Labs in "Digital Heritage," describing their innovative immersive installations for presenting the audio-visual archives of the Montreux Jazz Festival. Yiyun Kang's *CASTING* uses projection mapping to

create a mixed-reality environment within the Cast Courts exhibition at the Victoria and Albert Museum in London. Brittany Myburgh's article "Here and Now" explores how the use of new media in works by indigenous Canadian artists Ruben Komangapik, Kent Monkman and Adrian Duke disrupts linear time and Western visions of history.

Many of the papers emphasize the role of design and craft in digital media practices. Yuichiro Katsumoto's "Robotype" explores novel forms of kinetic typography using robotic displays. "Data Materialization," by Courtney Starrett, Susan Reiser and Tom Pacio, articulates the design workflow utilized to generate a data-informed fabricated object. Daniel C. Howe, Qianxun Chen and Zong Chen's *Advertising Positions* presents a provocative series of data portraits that are based on the corporate advertising profiles used to target individual users. Daniel Temkin's *Entropy* and *FatFinger* projects imbue the craft of computer programming with an awareness of the inevitable presence of errors that arise when coding, resisting the perfectionistic compulsivity of trying to design these faults away. Tobias Klein discusses his projects *Augmented Fauna* and *Glass Mutations*, articulating a synthesis between digital workflows and traditional craft processes through explorations of glass blowing and 3D printing. The Art Papers jury selected "Augmented Fauna and Glass Mutations" for this year's Best Paper award.

The SIGGRAPH Art Papers jury serves the community through providing authors with valuable feedback, and I thank each of the jury members—Anil Çamcı, Yoon Chung Han, Haru Hyunkyung Ji, Shannon McMullen, Everardo Reyes, Daria Tsoupikova, Robert Twomey, Graham Wakefield and Fabian Winkler—as well as the numerous external reviewers for their commitment to the reviewing process. Over the past year, I have been repeatedly reminded of the generosity, collegiality and vision of my fellow SIGGRAPH chairs and organizers, including especially Andrés Burbano, Fahad Haddad and Roy C. Anthony. The Art Papers track simply would not have been possible without the SmithBucklin Conference Administration team's organizational acumen, and in particular I relied on the support of Elizia Artis and Leona Caffey throughout the year, often on a daily basis. The 2018 Art Papers builds off of the successes of previous years, and I thank last year's Art Papers chair Ruth West for her guidance and inspiration, along with Roger Malina and the entire Leonardo team. Finally, I want to extend my appreciation to all of the 2018 Art Papers contributors for sharing their work with the ACM SIGGRAPH and Leonardo communities.

Angus G. Forbes is an Assistant Professor in the Computational Media Department at University of California, Santa Cruz, where he directs UCSC Creative Coding. His research investigates novel techniques for visualizing and interacting with complex scientific information, and his interactive artwork has been featured at museums, galleries and festivals throughout the world. More information about Forbes's work can be found at <https://creativecoding.soe.ucsc.edu>.