PROMOTION RECOMMENDATION
The University of Michigan
Penny W. Stamps School of Art and Design

Sophia Brueckner, assistant professor of art and design, Penny W. Stamps School of Art and Design, assistant professor of information, School of Information, and assistant professor in the Digital Studies Institute, College of Literature, Science, and the Arts, is recommended for promotion to associate professor of art and design, with tenure, Penny W. Stamps School of Art and Design, associate professor of information, without tenure, School of Information, and associate professor in the Digital Studies Institute, without tenure, College of Literature, Science, and the Arts.

Academic Degrees:
M.S.	2014	Media Arts and Sciences, Massachusetts Institute of Technology, Cambridge, MA
M.F.A.	2012	Digital + Media, Rhode Island School of Design, Providence, RI
Sc.B.	2005	Applied Mathematics/Computer Science, Brown University, Providence, RI

Professional Record:
2020 – present	Assistant Professor in the Digital Studies Institute, College of Literature, Science, and the Arts, University of Michigan, Ann Arbor
2017 – present	Assistant Professor of Information, School of Information, University of Michigan, Ann Arbor
2015 – present	Assistant Professor of Art and Design, Stamps School of Art and Design, University of Michigan, Ann Arbor

Summary of Evaluation:
Teaching – Professor Brueckner has established herself as a highly effective, innovative, and inclusive instructor who is adept at teaching across disciplines including: design, art, technology, information, computation, engineering, and science fiction literature. She brings to the classroom an encyclopedic knowledge of technology and related fields. She has taught successfully at the undergraduate and graduate levels, advised master's students in multiple units, and her courses attract students from across the university. Students report that she challenges them to think beyond traditional disciplinary boundaries, encourages experimentation, and motivates them to reconsider their relationship to technology. Indicative of her interdisciplinary approach to teaching, students also describe her success in structuring classes to support students of differing educational backgrounds, providing customized feedback that builds on their area of expertise or interest.

Professor Brueckner has demonstrated a commitment to enhancing the school's instructional environment. She played a key role in the design and development of a digital fabrication studio that services all Stamps students, and she received a Gilbert Whitaker Grant to create a digital archive and materials library for students interested in digital fabrication. As a female leader in the male-dominated technology world, students noted that Professor Brueckner serves as a

transformative role model - particularly those who do not identify as male – and cite her teaching and mentoring as pivotal in their choice to pursue related careers.

Creative Work / Research – Professor Brueckner's contributions lie at the intersection of art and technology or more specifically media art and human-computer interaction. She is part of a relatively new community of artists, designers, and researchers whose practices and approaches are often described as "critical and speculative design," "design fiction," and "discursive design." Professor Brueckner is a prominent voice in this community. Her work has been consistently presented at some of the leading and most competitive peer-reviewed venues in her field including ISEA, the annual International Symposium on Electronic Art; and the prestigious ACM (Association for Computing Machinery) conferences SIGGRAPH, the premier conference and exhibition in computer graphics and interactive techniques, and TEL, the International Conference on Tangible, Embedded and Embodied Interaction. Professor Brueckner is an often-invited speaker at national and international fora and is adept at using the full spectrum of public engagement – including podcasts, academic conferences, artist talks, and keynote address - to reach a broad range of audiences.

Professor Brueckner's work has been recognized through residencies, including the prestigious Nokia Bell Labs E.A.T. residency and the Autodesk Pier 9 artist-in-residence program. Her writings have been published in numerous peer-reviewed journals and conference proceedings. She has secured more than $1 million in funding in the past five years to support her research collaborations.

Significant Recent Works and Activities

2020	Principal Investigator, *2Inspire Project*, U-M Bioscience Initiative ($470,000)
2020	Juried Exhibition, "Captured by an Algorithm," SIGGRAPH 2020 Art Gallery, Washington, DC
2020	Juried Exhibition, "Captured by an Algorithm," ISEA 2020, Montreal, Canada
2020	Artist-in-Residence on *Humanizing Technology*, Nokia Bell Labs E.A.T. ($20,000)
2020	Keynote Speaker, Commiserate New Media Art Festival, University of Chicago, Chicago, IL
2019	Brueckner, Sophia. "Captured by an Algorithm." In Proceedings of the 9th International Conference on Digital Interactive Arts (ARTECH 2019), Association for Computing Machinery, New York, NY, Article 83, 1-4.
2019	Keynote Speaker, STRP Bienniäle, Eindhoven, Netherlands
2018	Co-Principal Investigator, *Sensing Algorithms: A Collaboratory*, Michigan Humanities Collaboratory grant ($345,000)
2018	Invited 2-person Exhibition, *Unscripted Interfaces* (multiple works), GALLERYSKE, Bangalore, India
2016	Co-Investigator, *Global Heartbeat*, National Academies Keck Futures Initiative Grant ($100,000)

Service – Professor Brueckner is a dedicated university citizen and an active contributor to the profession. In addition to developing Stamps facilities to support digital fabrication, she has been active in the university's Augmented/Virtual/Mixed Reality (AVMR) initiative ongoing

commitment, and advocacy for interdisciplinary research and teaching on campus is augmented by her involvement with various efforts at the Duderstadt Center including serving as the ArtsEngine faculty liaison and on the Duderstadt Center Director search committee. Her professional service contributions include national and international conference committees and other leadership roles on various ACM committees, panels, and juries.

External Reviewers:
Reviewer A: "I can say with certainty that Professor Brueckner's work would equally fulfill (and indeed surpass) the requirements for tenure and promotion at my own institution…Prof. Brueckner demonstrates everything one could hope for in a scholar at her career stage, and in many respects substantially more."

Reviewer B: "Sophia has a truly exceptional track record of obtaining funding to support her work. Her portfolio of grants and awards would be impressive for an Assistant Professor in a computer science or engineering department."

Reviewer C: "Her practice represents a valuable bridge between the conceptual, narrative and rhetorical registers of art and design on one hand, and technological and procedural (e.g., coding and form-giving) ones on the other. Many practitioners and scholars in the space tend to be markedly more adept or comfortable with one side of this equation than the other. In her work the balance of technical and poetic is striking."

Reviewer D: "I find her work to be superior in its ability to speak to broad and numerous audiences: experts and non-experts; artists and non-artists; etc. The poetics and the politics evident in her work are inspiring – and in comparing to her peer group – her strategic thinking sets her as a beacon above the crowd of some truly incredible individuals in their own right."

Reviewer E: "Sophia Brueckner is creating significant, vital, and internationally recognized work. Her work bridges art, technology and other disciplines in ways that few others are accomplishing, bringing real engineering and design into a creative practice."

Reviewer F: "I am also quite impressed at the interdisciplinarity of Professor Brueckner's work and her ability to connect numerous academic disciplines and apply that to her teaching. I believe that with this type of hybrid practice and research, she is at the forefront of a changing landscape in the way we will teach art in the 21st century."

Reviewer G: "Professor Brueckner has been successful in exhibiting and sharing her work at several major art and tech conferences such as ISEA as well as other ACM Specialized Conferences in ACM IoT, ACM ARTECH and ACM ISCW. This is commendable as these events tend to take much greater risks with their selections over more traditional art galleries."

Reviewer H: "Professor Brueckner is a translator. She takes complexity and translates it for broader audiences. Complex C++ code is turned into song. Complex social psychology and empathy feelings are turned into experiential warm temperatures. Complex GPS location data is turned into stitched Google street (skyward) views. Complex Kindle data is turned into quasi-familiar decorative bric-a-brac."

Reviewer I: "The quantity and quality of creative work that Sophia Brueckner has produced is excellent. It is not surprising that it has been recognized and supported by the leading institutions in the field of art and technology/digital media, such as SIGGRAPH and ISEA, and beyond…Within the field of artists who are critically-engaging speculative futures, Sophia Brueckner holds her own."

Summary of Recommendation:
Professor Brueckner is a high-profile interdisciplinary artist and researcher, an innovative teacher, and dedicated member of the faculty. We strongly recommend Sophia Brueckner for promotion to associate professor of art and design, with tenure, Penny W. Stamps School of Art and Design, associate professor of information, without tenure, School of Information, and associate professor in the Digital Studies Institute, without tenure, College of Literature, Science, and the Arts.

Gunalan Nadarajan
Dean and Professor
Penny W. Stamps School of Art and Design

Thomas A. Finholt
Dean, School of Information

Anne Curzan, Dean
Geneva Smitherman Collegiate Professor of
English Language and Literature, Linguistics,
and Education,
Arthur F. Thurnau Professor
College of Literature, Science, and the Arts

May 2021