PROMOTION RECOMMENDATION The University of Michigan A. Alfred Taubman College of Architecture and Urban Planning

Jonathan W. McGee, assistant professor of architecture, A. Alfred Taubman College of Architecture and Urban Planning, is recommended for promotion to associate professor of architecture, with tenure, A. Alfred Taubman College of Architecture and Urban Planning.

Academic De	egrees:	
M.I.D.	2005	Georgia Institute of Technology, Atlanta, Georgia
B.S.M.E.	2001	Georgia Institute of Technology, Atlanta, Georgia
Professional	Record:	
2013 - Present		Assistant Professor of Architecture, A. Alfred Taubman College of
		Architecture and Urban Planning, University of Michigan
2008 - Present		Director of Fabrication Lab, A. Alfred Taubman College of Architecture and
		Urban Planning, University of Michigan
2008 - Present		Founding Partner, Senior Designer, Matter Design
2008 - 2013		Lecturer in Architecture, A. Alfred Taubman College of Architecture and
		Urban Planning, University of Michigan
2008		Instructor, Harvard Graduate School of Design
2007 - 2008		FABLab Coordinator, Harvard Graduate School of Design
2005 - 2008		Founding Partner, Thingafarm, LLC

<u>Summary of Evaluation</u>:

<u>Teaching</u>: Professor McGee's teaching focuses on specific areas of the architecture program engaging digital fabrication. He has taught courses in both advanced fabrication and robotic fabrication, and practicums and material engagement courses. Professor McGee views his teaching as fundamentally collaborative, both with other instructors and the students. Along with providing a baseline knowledge in the field, he understands the importance of challenging the students with problems that are not readily solved, those on the cutting edge of contemporary design and fabrication discourse. In his courses, Professor McGee strives to teach not only the how, but the why of digital fabrication. He does this by introducing students to a wide range of tools, both software and hardware, as well as a variety of contemporary design to fabrication workflows. A number of Professor McGee's students have gone on to publish and/or present their work from his courses in various venues and two of his students have received the KUKA Young Potential Award for Best Scientific Paper. As a researcher, Professor McGee operates at the cutting edge of digital fabrication in architecture. His ability to make that world accessible to students is invaluable.

<u>Research</u>: Through his work in the new field of digital design and robotic manufacturing in architecture, Professor McGee has achieved an international reputation as a leader in the synthesis of engineering and architecture that promises to transform the built environment. As the director for the last ten years of the Taubman College's Digital Fabrication and Robotics Lab, Professor McGee has been critical in establishing the college's global leadership in this field. Throughout his work, Professor McGee has researched "closed-loop design feedbacks" which engage all aspects of the process, from material behaviors and fabrication constraints, to tool development and algorithmic code driven design. In addition, he comprehends how architecture poses fundamentally different problems due to its scale and complexity related to unique site and material constraints. Professor

McGee's work has received much recognition in the form of national awards, publications, and exhibitions. These include the ACADIA Award for Innovative Research, the Architectural League Prize for Young Designers given by the Architectural League of New York, a Merit Award from Architecture Magazine R+D Awards, an Honorable Mention from Architecture Magazine R+D Awards, and an Architecture A+ Award, Juried and Popular Vote, from Architizer. Along with design awards and project publications, Professor McGee's research has accrued a substantial amount of both internal and external funding as the principal investigator, co-principal investigator or collaborator.

Recent and Significant Publications, Exhibitions and Awards:

- Ng, Tsz Yan and Wesley McGee, Asa Peller. "Hard + Soft: Robotic Felting." Finalist Juried and Popular Vote, A+ Awards, Architizer,
- Ng, Tsz Yan and Wesley McGee, Asa Peller. "Hard + Soft: Robotic Felting." Merit Award, R+D Awards, Architect Magazine, 2018.

McGee, Wesley. Award for Innovative Research, ACADIA, 2017.

- McGee, Wesley and Geoff Thun, Kathy Velikov, Daniel Tish. "Infundibuliforms." Honorable Mention, R+D Awards, *Architect Magazine*, 2016.
- Clifford, Brandon and Wesley McGee. "Matter Design." Architectural League Prize for Young Designers, Architectural League of New York, 2013.

<u>Service</u>: Professor McGee's service is particularly notable for his involvement with the broader academic community related to his specific area of expertise. The most significant being his role as the conference chair and book editor for the ROBArch 2014 international conference that was held at the University of Michigan. Professor McGee played an essential role in bringing the conference to campus and organizing the event, which is the sole venue for creative design work specifically related to robotic fabrication. Additionally, Professor McGee has been a conference chair for Fabricate 2014, a workshop leader for ROBArch 2012 and again for ROBArch 2016. He has been a reviewer for the ACADIA conference numerous times and was one of the fundamental voices in bringing the conference to Taubman College in 2016. He has also served the college as a member of the Technology Committee, the Space Planning Committee and has co-chaired the Lab Safety Committee.

External Reviewers:

Reviewer A: "Wes is truly a pioneer in the field of robotics in architecture... I consider Wes to be one of the world authorities in this field, especially with his unique background in industrial and mechanical engineering, which allows him to bring another level of creativity with machinery, tools, and so on to use them as creative tools in design processes. He is one of the leaders of the next generation..."

Reviewer B: "Wes has impressively demonstrated a continuous high research profile and is internationally seen as one of the trail-blazers since 2012. In his research and teaching Wes demonstrates an extraordinary degree of competence at many levels..."

Reviewer C: "The field of architectural robotic fabrication has grown exponentially over the past decade. Professor McGee has been a leading and instrumental figure in this movement in North America and increasingly across the globe. Professor McGee, through his collaborations with talented colleagues, has set a high bar for impact and outcomes, establishing a national reputation for both himself and the University of Michigan in the space of architectural robotic fabrication."

Reviewer D: "I find the creative work of Mr. McGee to be on the cutting edge of design research, and would rank it at the very top in the field."

Reviewer E: "Without a doubt, the quality, quantity, focus, and scholarly impact of Wes McGee's work is the highest I've ever seen as an external reviewer...This level of production and research is phenomenal and speaks to Wes's ability to collaborate with fellow colleagues and produce innovative work in a number of diverse areas."

Reviewer F: "Without question, I believe that Professor McGee's research through his collaborations is operating at the highest level. He is clearly widely respected by his peers, extremely active in producing work and disseminating it through scholarly review... His accomplishments in exhibitions, publications, speaking engagements, awards, and funded research are exemplary and his name is operating at an international scale."

Reviewer G: "As an engineer, industrial and architectural designer, Prof. McGee is a leader in the field of digital and robotic fabrication, where he integrates fundamental research, teaching, and practice with depth, rigor, curiosity, creativity, and expanded thinking."

Reviewer H: "The originality and scientific excellence of his research can be witnessed by the many prizes that he has been awarded as well as his strong international reputation as an important critical and creative force within the field."

Summary of Recommendation:

Professor McGee has achieved an international reputation as a leader in the synthesis of engineering and architecture that promises to transform the built environment. As the director for the last ten years of the Taubman College's Digital Fabrication and Robotics Lab, Professor McGee has been critical in establishing the college's global leadership in this field. He is a well-regarded teacher and has also provided important service to the program, college, university and profession. It is with the support of the Taubman College Promotion and Tenure Committee and the Executive Committee that I recommend Jonathan W. McGee for promotion to associate professor of architecture, with tenure, A. Alfred Taubman College of Architecture and Urban Planning.

Jonathan Massey Dean and Professor A. Alfred Taubman College of Architecture and Urban Planning