

PROMOTION RECOMMENDATION
The University of Michigan
College of Engineering
Department of Civil and Environmental Engineering

SangHyun Lee, associate professor of civil and environmental engineering, with tenure, Department of Civil and Environmental Engineering, College of Engineering, is recommended for promotion to professor of civil and environmental engineering, with tenure, Department of Civil and Environmental Engineering, College of Engineering.

Academic Degrees:

- Ph.D. 2006 Massachusetts Institute of Technology, Construction Management and Information Technology, Cambridge, MA
M.S. 2003 Massachusetts Institute of Technology, Civil Engineering (Information Technology) Cambridge, MA
B.S. 2000 Dong-A University, Architectural Design, Busan, South Korea

Professional Record:

- 2014-Present Associate Professor (with tenure), Department of Civil and Environmental Engineering, University of Michigan
2010-2014 Assistant Professor, Department of Civil and Environmental Engineering, University of Michigan
2011-2014 Adjunct Professor, Department of Civil and Environmental Engineering, University of Alberta, Edmonton, Canada
2007-2010 Assistant Professor, Department of Civil and Environmental Engineering, University of Alberta, Edmonton, Canada
2007-2007 Visiting Lecturer, Department of Civil and Environmental Engineering, Massachusetts Institute of Technology, Cambridge, MA

Summary of Evaluation:

Teaching: Professor Lee has excelled in all facets of education, including developing and teaching classes, designing new and globally-accessible online curriculum, as well as advising and mentoring students. At the University of Michigan, Professor Lee has amassed a strong teaching record having taught a range of graduate courses and fundamental undergraduate classes. His teaching evaluations are representative of his effectiveness as an educator, wherein his Q1 and Q2 teaching scores have almost uniformly been in the high-4s. Professor Lee is a caring and passionate mentor of students conducting research under his supervision. He has advised nine Ph.D. students at the University of Michigan, four of whom have graduated. Professor Lee also exhibits a passion for engaging undergraduate students in research projects. Professor Lee has proven himself to be a significant contributor to the educational mission of the university.

Research: Professor Lee is an internationally recognized leader in research related to construction dynamics and human-infrastructure interfaces. His success as a multi-disciplinary authority on the topic is due to his versatility to conduct rigorous theoretical work in conjunction with experimental validation in the field. Evidence of the prominence Professor Lee has attained is his selection for the 2014 ASCE Daniel W. Halpin Award for Scholarship in Construction, the 2014 ASCE Thomas Fitch Rowland Prize, the 2015 FIATECH Outstanding Early Career Researcher Award, and the Tom Waters Award at the 2018 Applied Ergonomics Conference, in addition to numerous other Best Paper Awards. Professor Lee is a highly productive scholar. He has over 75 published or accepted refereed journal papers in an impressive array of venues, of which over 35 have been completed since his promotion in 2014. In addition, he has amassed a robust level of funding with \$3.2M dedicated exclusively to his research program, \$2.7M of which has been at the University of Michigan. In addition to being an exemplary researcher, he embodies an entrepreneurial spirit that is evident from his role as founder of Kinetica Labs, a University of Michigan high-tech spinout focused on the development of sensing and simulation technology for occupational safety and health. External reviewers were supportive of promotion and referred to his national and international stature as well as his innovation and impact in construction.

Recent and Significant Publications:

- Han, S., Lee, S. “A Vision-based Motion Capture and Recognition Framework for Behavior-based Safety Management,” *Automation in Construction*, 11/2013; Vol. 35 (No 11): pp. 131-141.
- Anderson, K., Lee, S. “An Empirically Grounded Model for Simulating Normative Energy Use Feedback Interventions,” *Applied Energy*, 2016; Vol. 173: pp. 272-282.
- Choi, B., Lee, S. “The Role of Social Norms and Social Identifications in Construction Workers’ Safety Behavior 2: Group Analyses for the Effects of Cultural Backgrounds and Organizational Structures on Social Influence Process,” *Journal of Construction Engineering and Management*, 2017; Vol. 143.
- Jebelli, H., Hwang, S., Lee, S. “EEG-based Workers’ Stress Recognition at Construction Sites,” *Automation in Construction*, 2018; Vol. 93: pp. 315-324.
- Hwang, S., Jebelli, H., Choi, B., Choi, M., Lee, S. “Measuring Workers’ Emotional State during Construction Tasks Using Wearable EEG,” *Journal of Construction Engineering and Management*, 2018; Vol. 144.

Service: Professor Lee has demonstrated his leadership through an extensive record of service to the university and professional communities. He has made a significant impact on the international construction engineering community by serving on the Board of Governors of the American Society of Civil Engineers (ASCE) Construction Institute and as chair of the Executive Committee of the Construction Research Council. Within the university, Professor Lee has been an enthusiastic leader and member of a number of departmental committees. In particular, his leadership in the establishment and growth of the UM Construction Industry Alliance Program (UMCIAP) has enriched the interaction between the Construction Engineering and Management group and the construction industry, which is vital to the long-term success of the program and has propelled it to a higher level of international prominence.

External Reviewers:

Reviewer A: “Dr. Lee is certainly a highly impactful and productive researcher within construction engineering and management area.”

Reviewer B: “Dr. Lee has been building a well-balanced dossier that clearly addresses the research, scholarly, teaching, advising, service, and outreach expectations of an academic ... it is clear to me that Dr. Lee has been providing exemplary contributions in all areas of university life and, even more importantly, that he will continue to do so.”

Reviewer C: “Dr. Lee’s research productivity and quality are outstanding ... Dr. Lee is a hardworking, extremely intelligent individual of excellent character who already has many significant accomplishments.”

Reviewer D: “I would consider the academic and research accomplishments by Prof. Lee comparable to those who would be promoted to Full Professor with Tenure at any top universities in this country. He has demonstrated his research ability and potential to become a leading academic researcher in civil engineering.”

Reviewer E: “Prof. Lee is widely known among faculty focused on understanding and improving industry Dynamics ... as a thought leader who conducts high quality research and who takes the time to disseminate that research widely through scholarly publications ... I very strongly recommend, without hesitation, that Prof. Lee be promoted to Professor with tenure at the University of Michigan.”

Summary of Recommendation: Professor Lee is a prominent international leader of the civil and environmental engineering field who has made significant intellectual contributions to the study of construction dynamics and human-infrastructure interfaces applied to civil engineering. He is a charismatic educator who has a distinguished record of motivating and promoting the aspirations of his students. Professor Lee plays key leadership roles in the international construction engineering research community. It is with the support of the College of Engineering Executive Committee that I recommend SangHyun Lee for promotion to professor of civil and environmental engineering, with tenure, Department of Civil and Environmental Engineering, College of Engineering.



Alec D. Gallimore, Ph.D.
Robert J. Vlasic Dean of Engineering
College of Engineering

May 2019