**Faculty Profile: Gunnar Lucko**

Professor and Director of Construction Engineering and Management Program

Department: Civil and Environmental Engineering

School: School of Engineering

Email: [lucko@cua.edu](mailto:lucko@cua.edu)

Phone: 202-319-4381

Education: Ph.D., Civil and Environmental Engineering, Virginia Tech, 2003

**Research Interests and Expertise:**

Schedule modeling and analysis, delay prevention by strategic use of float in network schedules, performance measurement of schedule timeliness, interaction with aspects like resources and costs, novel uses of singularity functions in construction management, simulation of heavy equipment operations, optimization methods, and engineering education.

**Biography:**

Gunnar Lucko joined Catholic University of America in 2005 and directs its construction engineering and management program. He holds Ph.D. and M.S. (Virginia Tech) and a 5-year German diploma (Hamburg University of Technology) in structural engineering. He has authored over 50 journal and over 70 conference papers. His research has been supported with five grants by the National Science Foundation (NSF) to date as well as industry foundations. In a humanitarian research project for VentureWell (formerly National Collegiate Inventors and Innovators Alliance) he, undergraduates, and professionals designed and built a small health clinic with low-cost, sustainable seismic foundation dampers in rural El Salvador. Since 2005 he mentors minority high schoolers in ACE (*Career Directions for Students in Architecture, Construction, and Engineering*). He has served in the CUA high school summer camp ‘Engineering New Frontiers’. He is senior specialty editor of the *Journal Construction Engineering and Management* and was chair of the *Construction Research Council* (ASCE). His work was honored with the 2013 ASCE *Daniel W. Halpin Award for Scholarship in Construction* and several university awards.

**Five Selected Papers:**

1. Katsuragawa, C. M., Lucko, G., Isaac, S., Su. Y. (2020). “Fuzzy Linear and Repetitive Scheduling for Construction Projects.” *Journal of Construction Engineering and Management* 147(3): 04021002(13).
2. Su, Y., Lucko, G., Thompson, R. C. (2020). “Apportioning Contract Float with Voting Methods to Correlated Activities in Network Schedules to Protect Construction Projects from Delays.” *Automation in Construction*, 118(October): 103263(16).
3. Düzkale, A. K., Lucko, G. (2016). “Exposing Uncertainty in Bid Preparation of Steel Construction Cost Estimating: I. Conceptual Framework and Qualitative C-I-V-I-L Classification.” *Journal of Construction Engineering and Management*, 142(10): 04016049(9).
4. Lucko, G., Rojas, E. M. (2010). “Research Validation: Challenges and Opportunities in the Construction Domain.” *Journal of Construction Engineering and Management*, 136(1): 127-135.
5. Lucko, G. (2009). “Productivity Scheduling Method: Linear Schedule Analysis with Singularity Functions.” *Journal of Construction Engineering and Management*, 35(4): 246-253.

**Professional Activities:**

* Mentor / Lead Mentor / Board Member ∙ *ACE Mentor Program of Greater Washington*: 2005-2006 and 2013-Present / 2006-2012 / 2010-2013
* Senior Specialty Editor / Reviewer ∙ *Journal of Construction Engineering and Management* / *Automation in Construction*, *Journal of Computing in Civil Engineering*, *Construction Management and Economics*: 2013-Present / 2005-Present, 2006-Present, 2009-Present
* Member / Secretary, Vice Chair, Chair, Past Chair ∙ ASCE Construction Institute, Executive Committee of the Construction Research Council: 2005-Present / 2009-2014
* Site visit organizer, Engineering New Frontiers, School of Engineering: 2019, 2018, 2017, 2014