

## VIMAL VISWANATHAN - PUBLICATIONS DURING 2008 -2017

### Journal Publications

1. Camburn, B., Viswanathan, V., Linsey, J., Jensen, D., Otto, K. and Wood, K., 2016, "Prototyping: State-of-the-art in Techniques, Methods, and Design Science" *Design Science* (Accepted for publication).
2. Viswanathan, V. , Tomko. M. & Linsey, J., 2015, "A Study on the Effects of Example Familiarity and Modality on Design Fixation," *Artificial Intelligence for Engineering Design, Analysis and Manufacturing (AI EDAM) Special Issue on Design, Computing and Cognition* Press.
3. Viswanathan, V., Atilola, O., Esposito, N. and Linsey, J., 2014, "Study on the Role of Physical Models in the Mitigation of Design Fixation" *Journal of Engineering Design* 25(3), pp. 25-43, DOI: 10.1080/09544828.2014.885934.
4. Viswanathan, V., and Linsey, J., 2014, "

Refereed Conference Papers & Talks:

(Recent papers are listed first)

1. Viswanathan, V., Sangelkar, S., Alexander, D., and Moody, J., 2016, "User preferences in the Design of Multipurpose Products: A Case Study on the Redesign of a Utility Tool," ASME International Design Engineering Technical Conferences, Charlotte, NC (Accepted)
2. Viswanathan, V., Solomon, J., and Unnikrishnan, V., 2016, "Improving Student Engagement in Engineering Classrooms using Brain-based Learning Techniques," ASEE Annual Conference, New Orleans, LA (Accepted)
3. Alexander, D., Moody, J., Sangelkar, S., and Viswanathan, V., 2016, "MAKER: Redesign of a Multipurpose Hardware Tool to Improve its Functionality and Marketability," ASEE Annual Conference, New Orleans, LA (Accepted)
4. Viswanathan, V., and Calhoun, M., 2015, "Improving Student Learning Experience in an Engineering Graphics Classroom through the Mastery Approach," ASEE Annual Conference, Seattle, WA
5. Viswanathan, V., Goodman, J., Atilola, A., and Linsey, J., 2014, "Prototyping: A Key Skill for Innovation and Lifetime Learning," ASEE/IEEE Frontiers in Education Conference, Madrid, Spain
6. Esposito, N., Viswanathan, V., and Linsey, J., 2014, "Study on the Factors Influencing the Usage of Environmentally Friendly Products," ASEE Annual Conference, Indianapolis, IN
7. Viswanathan, V., Ngo, P., Turner, C., and Linsey, J., 2013, "Innovation in Graduate Projects: Learning to Identify Critical Functions," ASEE/IEEE Frontiers in Education Conference, Oklahoma City, OK
8. Camburn, B., Dunlap, B., Kuhr, R., Viswanathan, V., Linsey, J., Jensen, D., Crawford, R., Otto, K., and Wood, K., 2013, "Methods for Prototyping Strategies in Engineering Design: Framework and Experimental Assessment," ASME International Design Engineering Technical Conferences, Portland, OR
9. Ngo, P., Viswanathan, V., and Linsey, J., 2013, "Principles of Analogy Usage in Design: A Pilot Study," ASME International Design Engineering Technical Conferences, Portland, OR
10. Lucero, B., Viswanathan, V., Linsey, J., and Turner, C., 2013, "MetaAnalogy through Performance Specification," ASME International Design Engineering Technical Conferences, Portland, OR
11. Viswanathan, V. and Linsey, J., 2013, "Training Future Designers: A Study on the Role of Physical Models," ASEE Annual Conference 2013, Atlanta, GA
12. Camburn, B., Dunlap, B., Kuhr, R., Viswanathan, V., Linsey, J., Jensen, D., Crawford, R., Otto, K., and Wood, K., 2013, "Connecting Design Problem Characteristics to Prototyping Choices to Form a Prototyping Strategy," ASEE Annual Conference 2013, Atlanta, GA
13. Viswanathan, V. and Linsey, J. 2013, "Mitigation of Design Fixation in Engineering Idea Generation: A Study on the Role of Defixation Instructions," International Conference on Research into Design, Chennai, India
14. Viswanathan, V. and Linsey, J., 2012, "Physical Modeling in Design Projects: Development and Testing of a New Design Method," ASEE/IEEE Frontiers in Education Conference, San Francisco, CA



5. Viswanathan, V., and Linsey, J., 2010, "Physical Models in Engineering Idea Generation," Armadillo XX: The Southwest Cognition Conference, at Texas A&M University, College Station, TX.
6. Gadwal, A., Schmidt, S., Viswanathan V., and Linsey, J., 2009, "Idea Generation in Engineering