

9. **Viswanathan, V.**, and Sangelkar, S., 2017, "Design of Multi-purpose Products: Guidelines from a User Perspective," ASME International Design Engineering Technical Conferences, Cleveland, OH.
10. **Viswanathan, V.**, 2017, "Design Fixation to Examples: A Study on the Time Decay of Fixation," International Conference on Engineering Design (ICED), Vancouver, Canada.
11. Oni, B., and **Viswanathan, V.**,

26. 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.
27. **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.
28. **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, Seattle, WA.
29. **Viswanathan, V.** and Linsey, J., 2012, "Physical Examples in Engineering Idea Generation: An Experimental Investigation," International Conference on Design Creativity (ICDC2012), Glasgow, UK.
30. **Viswanathan, V.** and Linsey, J., 2012, "A Study on the Role of Expertise in Design Fixation and its Mitigation", 2012 ASME IDETC – Design Theory and Methodology Conference, Chicago, IL.
31. Atilola, O., **Viswanathan, V.** and Linsey, J., 2012, "A Study on the

1. *Project Title:* Experiential Learning of Engineering Concepts in Virtual Learning Environments (VLEs)
PI: Keles, O., *Co-PIs:* Viswanathan, V. and Marbouti, F.
Source:

Graduate Studies Committee for Mechanical Engineering Department at Texas A&M University, **Graduate Pool Fellowship**, \$1000.

- ◁ *Design of automobile exhaust valve cooling system (Jan 2004 – Jun 2004)*, Supervisor: Dr. C. Muraleedharan, National Institute of Technology, Calicut, India - Designed and modeled a heat pipe system for cooling the exhaust valve of an automobile engine using FEA techniques and ANSYS software

TEACHING EXPERIENCE

- ◁ **Assistant Professor Mechanical Engineering**, San Jose State University (Aug 2016 – Present)

Courses taught

- Product Design & Development (graduate)
- Senior Design Project (senior)
- Mechanical Design (junior)
- Dynamics (junior)
- Design and Graphics (freshman)

- ◁ **Assistant Professor Mechanical Engineering**, Tuskegee University (Jan 2014 – July 2016)

Courses taught

- Mechatronics (senior level)
- Design for Manufacturing and Assembly (senior level)
- Mechanical Design (senior level)
- Freshman Design
- Engineering Graphics (freshman)
- Probability and Statistics for Manufacturing (Sophomore level)
- Experimental Mechanics (Sophomore level)
- E.I.T Review (FE review course)

- ◁ **Instructor Creative Decisions and Design**, Georgia Institute of Technology (*Aug 2013 – Dec 2013*)

Instructor of one of the studio sessions of this sophomore design course

Supervised five 3-4 student teams working on their Mechatronics project competition

Taught Mechatronics, machining, prototyping and the design theory (customer needs understanding, literature and patent search, identification of competing products, quality function deployment, technical specifications, functional decomposition, concept

INDUSTRY EXPERIENCE

- ◁ **Senior Design Engineer - Larsen & Toubro Limited**, Engineering & Construction Division, Surat, India (*Jul 2005- Jul 2008*)
 - ◁ Structural & Mechanical Design (Oil & Gas Upstream), Structural Design of offshore platforms and fabrication aids, design of piping (worked for 10 offshore platforms, for customers in India and Middle East), Design of pressure vessels, Mechanical design of waste heat recovery modules (Worked on 6 modules for various customers)
- ◁ **Summer Intern - Hindustan Machine Tools Ltd**, Cochin, India (*May 2004 Jul 2004*)
Machining parts for manufacturing of machine tools, Mastered the operation of CNC Machines
- ◁ **Summer Intern - Kerala State Road Transport Corporation**, Trivandrum, India (*May 2003*)

