

### Academic Rank:

Professor

### Education:

Ph.D., Mechanical Engineering, Huazhong University of Science and Technology, 1994

M.S., Mechanical Engineering, Harbin Institute of Technology, 1991

B.S., Mechanical Engineering, Hefei University of Science and Technology, 1988

### Service at Utah State University:

2014 – Present	Professor
2007 – 2014	Associate Professor
2001 – 2007	Assistant Professor

### Other Related Experience:

2010	Program Director, Division of Undergraduate Education, National Science Foundation, Arlington, VA.
1997 – 2000	Research Associate, University of Kentucky, KY.
1996 – 1997	Alexander von Humboldt Research Fellow, Technical University of Hamburg-Harburg, Hamburg, Germany.

### Technical Interests:

- Engineering education research (technology enhanced learning, engineering learning and problem solving, K-12 STEM education, engineering retention)
- Manufacturing engineering research (the modeling of machining processes)

### Courses Taught:

- Engineering Dynamics (3 credits)
- Finance and Grant Writing (3 credits)
- Contemporary Manufacturing Management (3 credits)
- Design for Manufacturability (3 credits)
- Machining Theory and Applications (3 credits)
- Advanced Topics in Metal Cutting (3 credits)

### Principal Publications in Engineering Education (last five years):

- Fang, N., Lawanto, O., Goodridge, W.H, Villanueva, I., Becker, K., (2016). A Research Experiences for Undergraduates (REU) Site Program on Engineering Education Research. International Journal of Engineering Education. Vol. 32(5A), pp. 1836-1846, 23:5, 1836-1846.
- Liu, G., Fang, N., (2016). Student misconceptions about force and acceleration in physics and engineering mechanics education. International Journal of Engineering Education. Vol. 32(1A), pp. 19-29.

- Ha, O., Fang, N., (2016). Spatial ability in learning engineering mechanics: critical review. *Journal of Professional Issues in Engineering Education and Practice*. Vol. 142(2), pp. 04015014-1 to 04015014-11.
- Fang, N., (2014). Difficult concepts in engineering dynamics: Students' perceptions and educational implications. *International Journal of Engineering Education*. Vol. 30(5), pp. 1110-1119.
- Fang, N., (2013). Increasing high school students' interest in STEM education through collaborative brainstorming with Yo-Yos. *Journal of STEM Education: Innovations and Research*. Vol. 14(4), pp. 34-40.

#### Scientific and Professional Societies:

- Member, the American Society for Engineering Education
- Member, the American Society of Mechanical Engineers
- Senior Member, the Society of Manufacturing Engineers