

## **Dr. Michael Giering** **Fellow, Data Analytics and Machine Intelligence**



### **Biographical Profile**

Michael Giering, Ph.D., is Fellow, Data Analytics & Machine Intelligence at United Technologies Research Center (UTRC) where he provides technical leadership and direction of applications of data analytics to UTC products, identification of strategic opportunities, leveraging of external relationships, and staff technical guidance and mentoring.

Previously, Giering headed the Service Technologies Initiative at UTRC where early stage capabilities developed included augmented reality, deep learning and cloud analytics. He joined UTRC in 2008 as a Principal Research Engineer in the Systems Dynamics & Optimization Group in the Systems Department, where he made key technical contributions to data driven Prognostics & Health Management (PHM) for buildings and driving the adoption of probabilistic graphical methods, including Bayesian Networks. In 2010, Giering was assigned to lead, staff, and develop a new Decision Support & Machine Intelligence Group in the Systems Department at UTRC.

Prior to joining UTRC, Giering was a Principal Research Scientist in the Catalyst central research group of Mars Inc. in Hackettstown, New Jersey, and a math and physics faculty member and computer science Chair at the Maine School of Science and Mathematics, Limestone, Maine.

Giering has published nine peer-reviewed papers and book chapters since joining UTRC and has had more than 10 U.S. and international patents filed in the areas of machine learning for PHM and more recently deep learning applications of multi-modal data fusion. He earned B.S. degrees in mathematics and physics from Alfred University, Alfred, New York; an M.S. in physics from Northeastern University, Boston, Massachusetts; and a Ph.D. in mathematics and physics (Molecular Science Interdisciplinary Program) from Southern Illinois University, Carbondale, Illinois.