# Multidisciplinary Optimization Workshop

# **Multidisiplinary Optimization using VisualDOC**

### What will be covered:

- Overview of VisualDOC Software Features and Capabilities
- Design of Experiments
- Optimization Using Response Surface Approximation
- Non-Gradient Methods
- Probablistic Optimization
- Using VisualDOC for Coupling Analysis Programs
- Hands-on Exercises will be Solved by Attendees with Instructor Help

### **About:**

The workshop gives the participants an opportunity to work with VisualDOC, our multi-disciplinary design, optimization, and process integration software. It will include a live demonstration of the features and capabilities of VisualDOC. The attendees will familiarize themselves and solve hands-on examples with the VisualDOC software. VisualDOC is a tool for design process definition, integration, execution, and automation. The design modules included are Optimization, Design of Experiments, Response Surface Approximation, and Probabilistic (Robust and Reliability-based) Analysis. VisualDOC can be used to add these modules to almost any design/analysis program. VisualDOC graphical user interface allows the user to easily create a connected work-flow of components and configure them. It's features include comprehensive concurrent monitoring and visualization tools, storage and reuse of generated simulation data for post-processing, full debugging support for model execution, and the ability to interactively inspect and monitor the design process. VisualDOC also supports batch-mode execution and provides programmatic access to all the included design modules. It can integrate with Excel, Matlab, various CAE software, and user-defined libraries and executables.

## **Registration Information**

If you have any questions regarding the workshop content, or would like to register please contact Phani Adduri (e-mail: padduri@vrand.com) (phone: 248-596-1611 x101). Early registration is encouraged due to limited seating.

### Cost:

FREE

### **Location:**

41700 Gardenbrook, Suite 115, Novi MI 48375

