



Topic: “Model-Based Design for Medical Device System and Software Development”

Presenter: Arvind Ananthan, Medical Device Industry Manager, MathWorks

Date: Thursday, August 15th, 2013

Agenda: 6:00-6:30 p.m. CDT – Dinner (\$5 Member / \$8 Nonmember) & Networking

6:30-6:45 p.m. CDT – Introductions & Announcements

6:45-8:00 p.m. CDT – Presentation and Q&A

- Locations:**
- 1. Schaumburg, IL – IBM, 10 N. Martingale Dr., Schaumburg, IL 60173 (2nd Floor Conference Room)**
 - 2. Lake Forest, IL – Hospira, 375 N. Field Drive, Building H3, Lake Forest, IL 60045 (1st Floor R&D Innovation Conf Rm)**
 - 3. Milwaukee, WI – Astronautics, 4115 N. Teutonia Ave., Milwaukee, WI 53209 (Board Room)**
 - 4. Madison, WI – Bjorksten | bit 7, 7 Fen Oak Ct., Madison, WI 53718 (Mendota Conference Room)**

Abstract

The Medical Device community is increasingly looking towards modeling and simulation techniques used in other safety-critical applications to reduce design risks and reduce probability of device recalls. Model-Based Design is a design methodology rooted in system modeling and simulation techniques that have been used for many years by the Aerospace, Automotive and Transportation industries for developing safety critical software systems. Using an ECG beat detection model as a case study, this presentation will demonstrate to how to apply Model-Based Design techniques to model, simulate, test, implement, and verify your designs using MATLAB and Simulink.

About Our Speaker

Arvind Ananthan is the Industry Manager for Medical Devices industry at the MathWorks. He has been with MathWorks since September 2001 in a variety of technical and business roles. Prior to his current role, he was a Product Manager for 6 years managing code generation and embedded targeting products such as MATLAB Coder and Fixed-Point Toolbox. Arvind has authored and presented many technical papers at various industry and academic conferences such as IEEE, AES, ASME, etc. around the world. Before moving into the technical marketing roles, he was a Senior Application Engineer for 4 years working with signal/video processing and communication in industries such as electronics, semiconductors, aerospace-defense, and medical devices. He holds an MSEE from University of Maryland Baltimore County with a focus on statistical signal processing and neural networks.

Questions?: For more information, go to <http://www.incose.org/Chicagoland/>.