Developing and deploying next generation remote patient health monitoring devices

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Abstract

With MATLAB and Simulink, you can design, develop, simulate, and deploy patient monitoring devices and Software as Medical Device (SaMD) applications in the cloud at scale while complying with global regulatory standards for medical devices. You can validate MathWorks® products for use in FDA/CE-regulated workflows and meet harmonized standards such as IEC 62304.

In this talk we will show you how to develop next-generation patient monitoring products, with reducing the time needed to bring the devices to market using MATLAB and Simulink.

Specific highlights include:

• Patient health monitoring and digital health device development

• Deploying the software on public and private clouds

• Developing apps for dashboards with integration to database servers and data streaming services

• Streamline certification of your medical software to safety standards such as IEC 62304

Biography

Akhilesh Mishra is the global medical devices industry manager at MathWorks. In his current role, Akhilesh closely works with customers developing digital health and medical devices, academic researchers, and regulatory authorities to help them see the value of modeling and simulation and how people can leverage latest trends such as AI to build the next generation medical devices.

Akhilesh holds a M.S. degree from University of Kansas in Electrical Engineering, and prior to MathWorks has worked as a signal processing lead for NASA OIB focused on radar based remote sensing of ice sheets of Greenland and Antarctica to study global sea-level rise.