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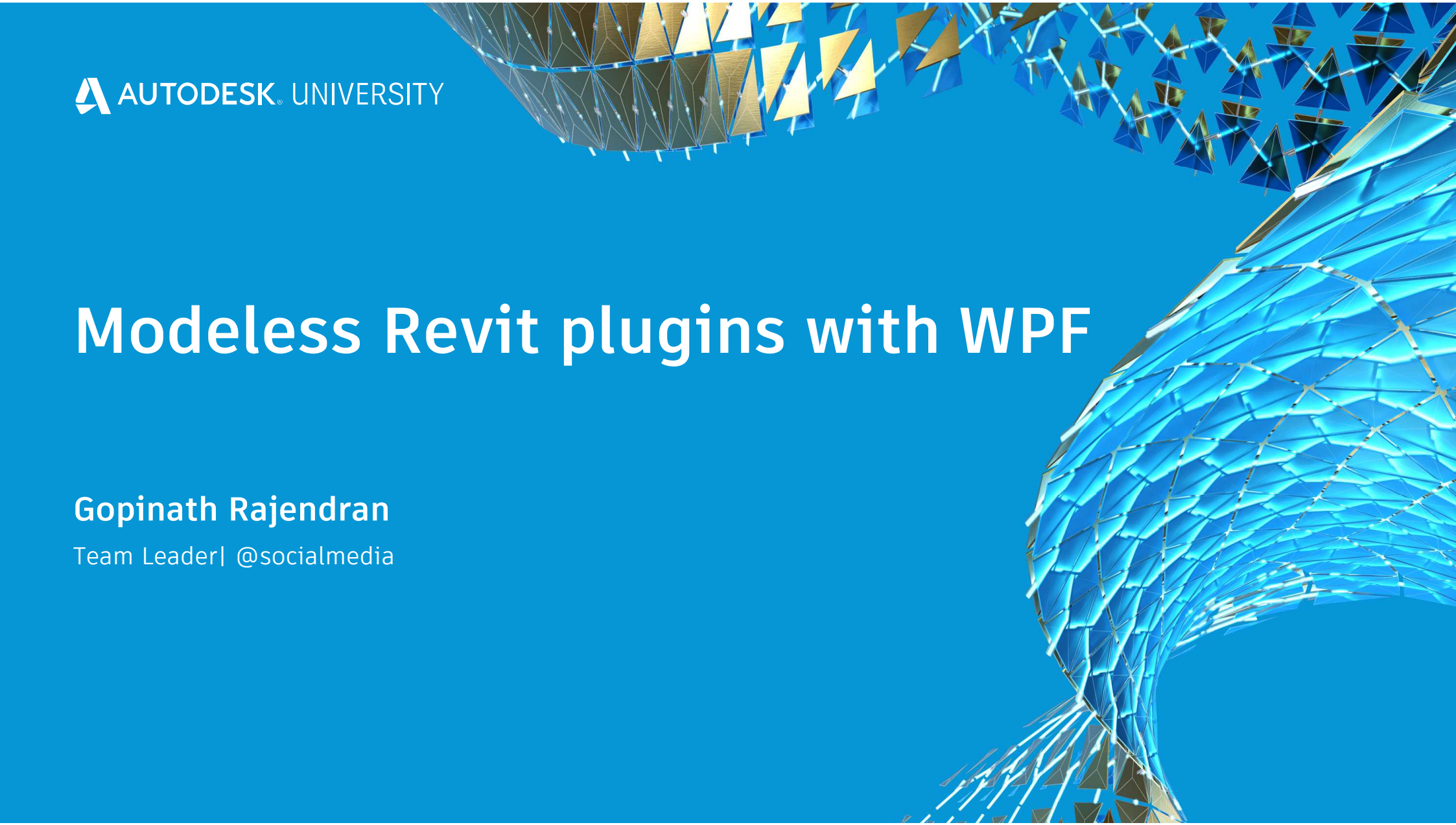

Modeless Revit plugins with WPF

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Speaker

Gopinath Rajendran has a background in Computer Sciences. He is the Team Leader and one of the key developers involved in the popular and free Revit plugins from DiRoots. He is highly involved in the implementation and training of developing custom software tools for Autodesk Revit for the past six years. His passion and commitment are focused on the development of tools that aims to automate tedious tasks with high accuracy and efficiency.

Modeless Revit plugins with WPF

Description

Are you interested to learn more about modeless Revit plugins? Yes! Great, this class is for you. User experience and accessibility are becoming a trend while developing software. How do you achieve that? User experience can be achieved by using WPF instead of Windows form and accessibility can be achieved by using modeless dialogs. This class will present the advantage of using WPF and modeless dialog while developing your Revit plugins. User can see the actions and data flows between Revit and plugin. In this session, a demo of the workflow will be shown and it consists of multiple steps that depend on each other to show the features that WPF provides.

Learning Objectives

- Learn why Revit API and C#?.
- Learn the basics of WPF, general advantages and disadvantages.
- Modeless applications and external events.
- Learn how to implement WPF and modeless dialog windows.

Revit API

- .NET API which can be used to automate repetitive tasks, extend the core functionality of Revit. Revit .NET API allows you to program with any .NET compliant language including C#, VB.NET, and C++/CLI

WPF

WPF (Windows Presentation Foundation), previously known as "Avalon", was initially released as part of .NET Framework 3.0 in 2006.

- **Advantages**
  - MVVM Pattern.
  - Nested controls.
  - Templates.
  - XMAL (designer)
  - Uses hardware acceleration

Modeless applications

Modeless application, which stays on the screen but permits other user activities.

External Events

The Revit API provides an External Events framework to accommodate the use of modeless dialogs.

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