PROPOSE A CLASS

SESSION DETAILS | REVIEW PROPOSAL | CONFIRMATION

Review Proposal

Almost done. To complete your proposal, you must click submit.

Review your proposal and make any necessary edits before submitting.

Please note, your anonymous submission will be published to the AU website in the coming days for review by the AU community. At the end of our Call for Proposals process, members of the AU community will have the opportunity to vote on all submissions. The AU team and Autodesk employees will also review this year's submissions. Feedback from the AU community will be 1 factor in selecting AU 2017 speakers.

You can make changes to your class proposal until May 17, however, please expect a short delay before your updates appear on the AU website.

Approved AU speakers will be notified at the end of June. You will have the option to add co-speaker(s) if your class is approved.

Class title

Scripting for Revit using IronPython and pyRevit

Class format

Instructional Demo

Class description

Writing scripts and macros for professional software is a great way to tap into the powerful engine that runs behind the scene, to be able to automate custom tasks or query information. For the past 2.5 years, I have been working on an open-source IronPython extension for Autodesk Revit that provides a simpler, more approachable environment for Architects and Engineers to dive into scripting for Autodesk Revit. It also acts as a simple platform that makes it easier for IT and BIM professionals to deploy their internal custom tools to their teams within their company. The primary objective is to familiarize the audience with scripting for Autodesk Revit using IronPython. The class will show the audience how easy and approachable the scripting process can be, and that being able to script for Autodesk Revit will be a powerful skill that will make interacting with the Autodesk Revit model even

easier. The class also presents pyRevit as a simple environment for IronPython scripting.

Length

90 Minutes

Relevant topics

Building Information Modeling (BIM), Generative Design, Software Development

If proposing a Panel, list any confirmed panelists:

If proposing a Roundtable session, what challenge will you explore in your discussion?:

Learning Objective 1

Understand what IronPython is and how it interacts with Autodesk Revit

Learning Objective 2

Learn basics of using IronPython in Autodesk Revit

Learning Objective 3

Learn basics of using pyRevit with Autodesk Revit

Learning Objective 4

Learn how to extend Autodesk Revit using IronPython scripts under pyRevit.

Class focus:

Getting started with new software

Where will learners apply this knowledge?

Technology Management

Who should attend your class?

Architect, BIM/VDC Manager, Mechanical Electrical Plumbing (MEP) Engineer, Structural Engineer, Technical Manager

Describe your audience.:

Architects, Engineers and BIM managers who like to get more out of Autodesk Revit and create custom tools

What level of expertise is required for your class?:

Beginner

Describe any required skills or knowledge.:

Mid-Level Understanding of Autodesk Revit and using Add-ons.

Relevant industry:

Architecture Services

Most relevant Autodesk product

Revit

Add Keywords:

Architecture, BIM, Data Management, MEP Engineering, Structural Engineering

Agree to HSW Guidelines:

Yes

If relevant, would you be willing to present your class during a Monday pre-conference event?:

Not relevant

Briefly summarize your class.:

Class will start with a quick introduction to creating add-ons and extension for Revit and then focuses on creating IronPython scripts and connecting to the Autodesk Revit API. Then, I'll talk about the current features and add-ons in the market that allow for IronPython interaction with Autodesk Revit and will introduce pyRevit. Then, I'll quickly explain how pyRevit works and will show some of the tools that has been created for it. Majority of the class will be devoted to creating a couple of simple and more complex tools using IronPython to show the power of scripting, and how these scripts can be added to the Autodesk Revit environment for quick execution.