Revit Programming for beginners

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How to easily access the power of the Revit API using free easy to use tools.

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ME Engineers

37 years of MEPT engineering

Mechanical

Electrical

Plumbing

Technology Design

A/V Design

illume

Energy Modeling

Event Overlay

Commissioning

Sports Lighting

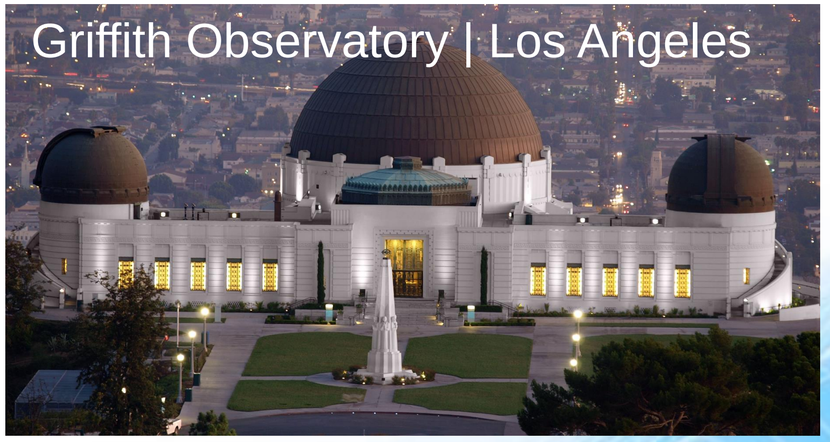
ME Engineers

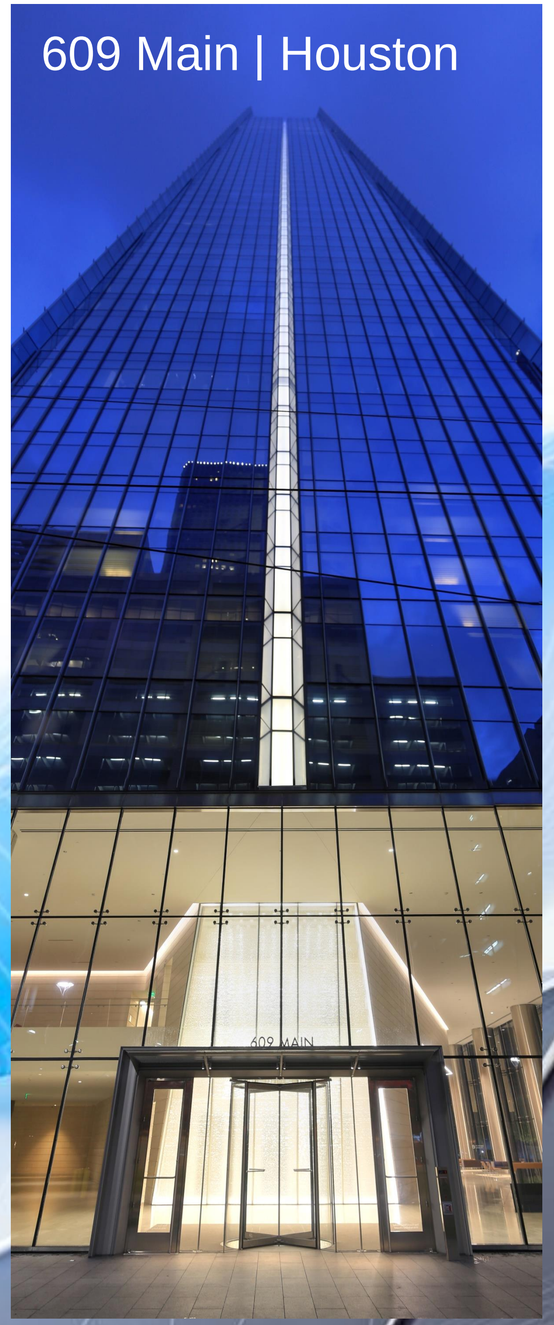
14 locations around the world

Baltimore
Chennai
Colorado Springs
Dallas
Denver
Doha
Houston
Kansas City
London
London South
Los Angeles
New York
San Francisco
Tucson

ME Engineers

Some of our top projects





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This will change everything!

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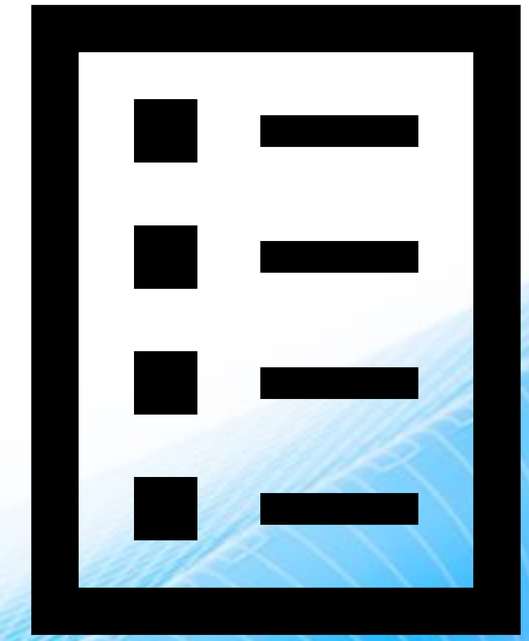
Today's Agenda

Revit API
Why Python
Open Source Tools
Revit Elements
Revit Filtered Element Collector
Revit Transaction
Using your tools with pyRevit



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Revit API

My day is spent solving problems.

The Revit API gives me a huge toolbox to be able to create a better solution.

It is having the ability to look inside of Revit allowing the user the ability to create tools instead of being stuck using tools already created

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Why Python?

Easy to read and write.

Free to use.

Interpreted not compiled.

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Open Source (free) Tools

Revit Lookup Created by Jeremy Tammik

Revit Python Shell Created by Daren Thomas

pyRevit Created by Ehsan Irennejad

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Revit Elements

Elements are the main part of Revit.

Each element has properties and methods.

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Revit Filtered Element Collector

Allow us to collect elements in the Revit Database.

First step for a script.

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Revit Transaction

Any changes to elements in the Revit Database must be done within a transaction.

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Use your tools with pyRevit

Choose where to save them.

Add location to pyRevit.

Reload pyRevit.

Update script and try as needed.

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Let’s try it.

Time for the product demo

Today’s we accomplished

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