

2021 BIM 360 Design Workflow for Revit Robot, Advance Steel & Dynamo

Lina El-Khoury

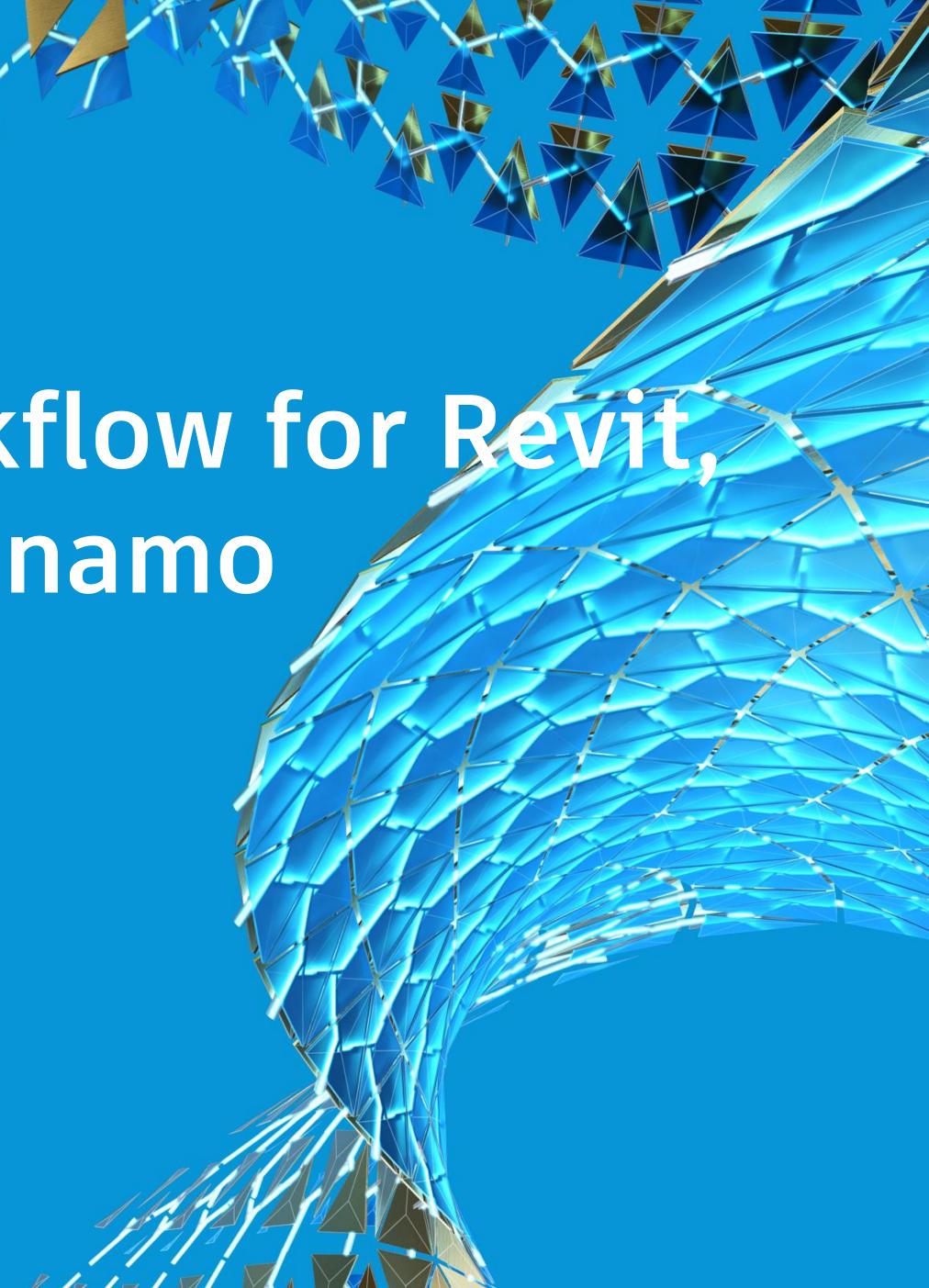
Design Applications Manager

Mahsan Omid

BIM Specialist

Hung Nguyen

**AEC/MFG** Consultant





### About the speaker

#### Lina El-Khoury

- Design Applications Manager at James KM Cheng Architects.
- With Over 25 years of experience in AEC and Manufacturing.
- Specializing in BIM technologies implementation and Building manufacturing.
- Always raising the bar for better BIM projects deliverables, team cohesion and collaboration with a forward-thinking.



## About the speaker

#### Mahsan Omid

Mahsan is a BIM specialist and technical consultant who is passionate about the marriage of thoughtful design and technical rigor. She has more than 15 years of combined industry and academic experience in all disciplines of AEC industry. She has helped various architectural, mechanical and structural firms leverage BIM for improved collaboration, implement integrated workflows and increase productivity, sustainability, precision and data quality.

Her academic activities inform Mahsan's industry practice to name a few, training professionals, writing research papers, testing best practices and delivering corporation training programs as a part of BIM innovation initiatives at SAIT and University of Calgary.

Mahsan is a Certified Autodesk BIM and CAD instructor and a technical advisory board member at Can BIM and Passive House Alberta.





## About the speaker

### Hung Nguyen

- Many years of experience in Autodesk Products.
- BIM & Manufacturing Technical Consultant.
- Presented multiple times at Revit Technology
  Conference (RTC), Canadian Festival of
  Architecture, CanBIM, and Autodesk University
  from 2013 to 2020.

## Class Description

There are many applications in the Autodesk AEC Collection, including specialized ones for Structure, Analysis and Detailing.

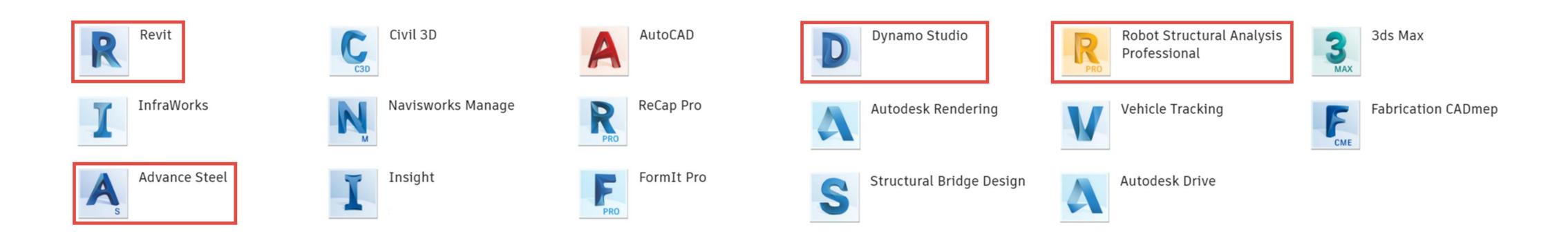
#### How is this unified collection changing the way we work?

In this 60-minutes session, we'll demonstrate how to work on a Revit structural model, link it to RSA for structural steel code check and optimization, link it to Advance Steel for creating the connections, Change the design in Revit with Dynamo and synchronize the models.

We will use BIM 360 Design to seamlessly collaborate on the project, curate, coordinate, and manage the deliverables - knowing that when design project teams have the right information at the right time, the work happens faster.

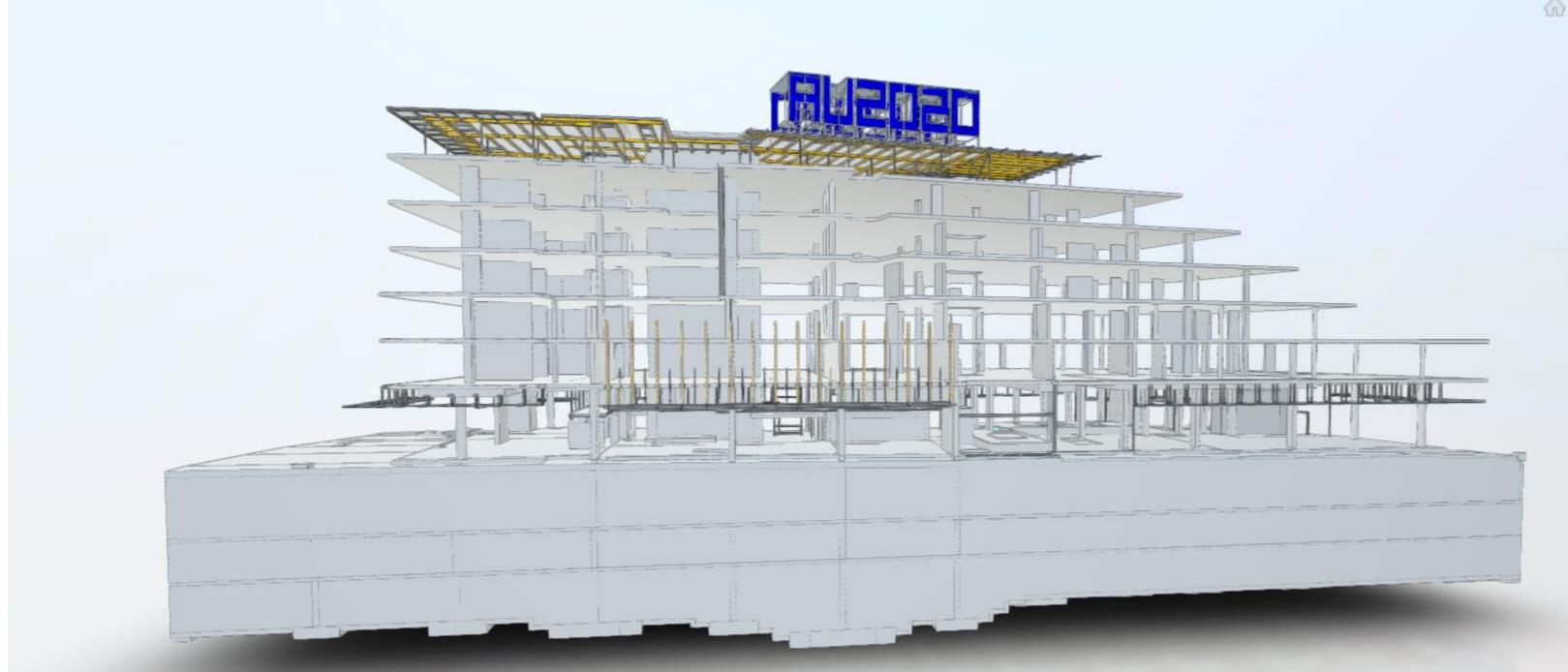
### Class Objectives

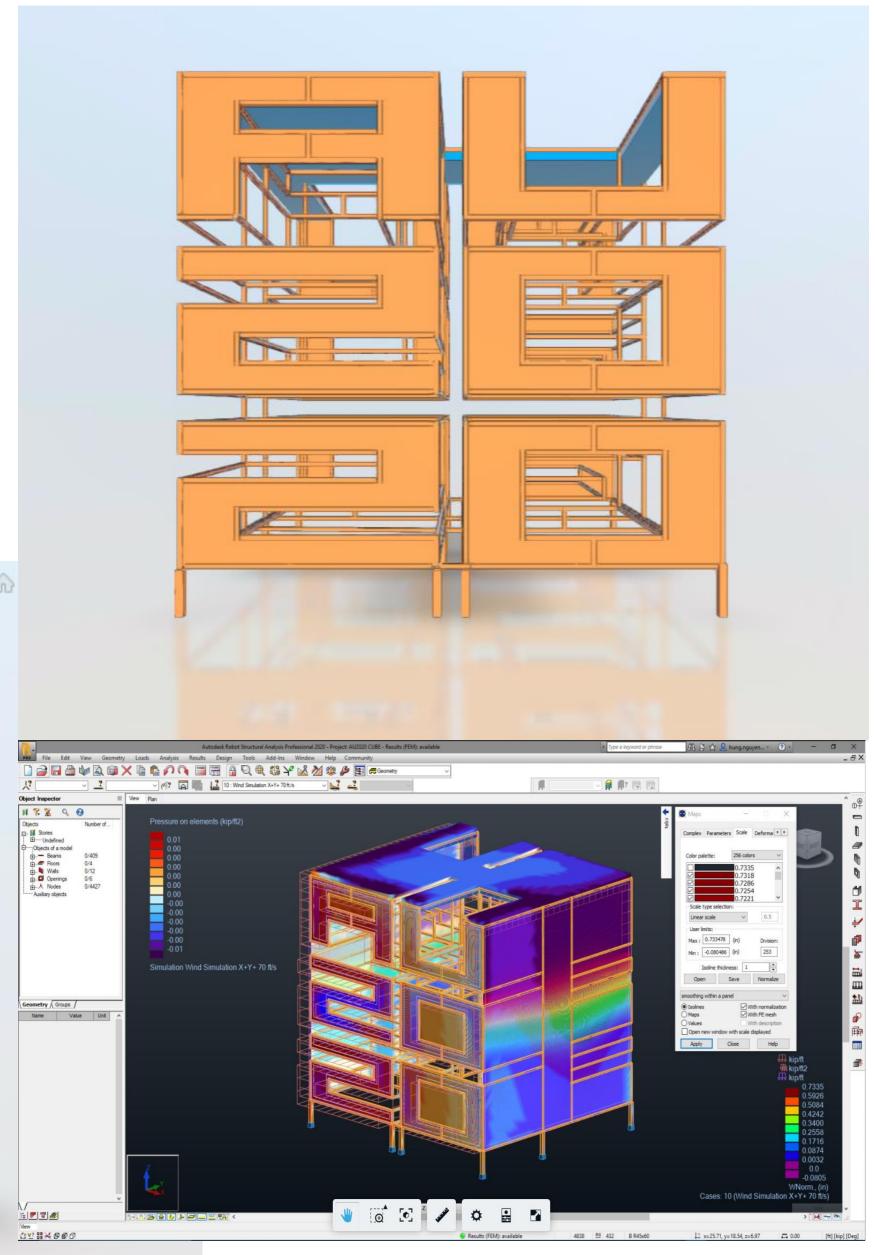
- Set up and manage BIM 360 Design workflow for Autodesk 2021 products.
- Effectively work with the 2021 workflow of Revit, RSA and Advance Steel.
- Effectively use RSA 2021 for structural steel code check and optimization.
- Learn the basic concept of Advance Steel connections, detailing, and Dynamo usage.



# Our Topics

- BIM 360 Intro
- Revit-RSA-Advance Steel-Dynamo Workflow
- Going Beyond AEC Workflow on BIM 360
- Q&A Live in a separate session





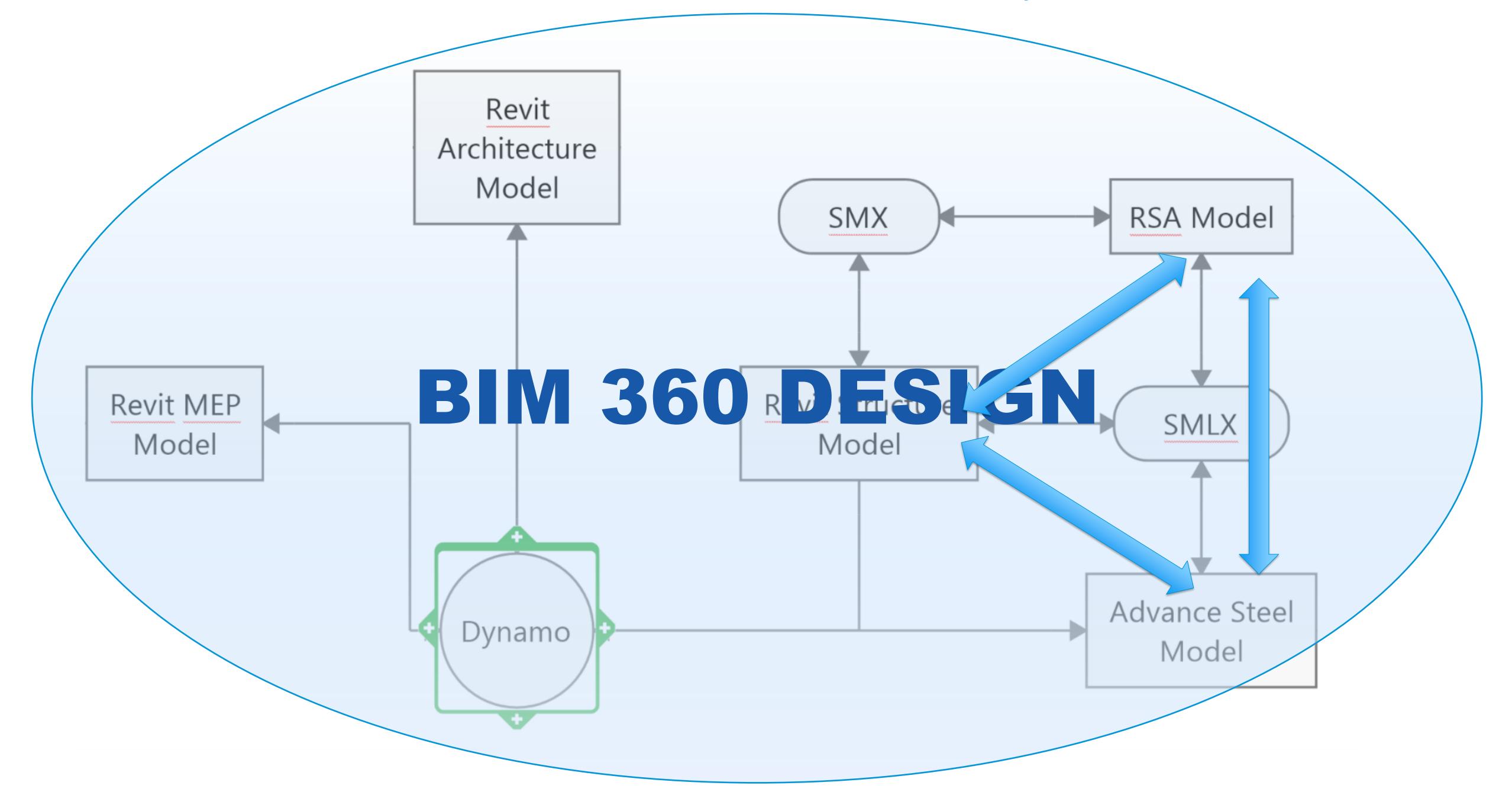


Developed by Grosvenor . Architectural design by James Cheng Architects. Interior design by James Cheng Architects & Mitchell Freedland Design





### BIM 360 - Revit - RSA - Advance Steel - Dynamo Workflow



#### **DEMO-1 FEATURES**

A QUICK OVERVIEW OF REVIT – ROBOT – ADVANCE STEEL – DYNAMO ON BIM 360

• LINKS REVIT STRUCTURE MODEL TO RSA AND ADVANCE STEEL

- REGIONAL CODE CHECK & OPTIMIZATION WITH ROBOT STRUCTURE ANALYSIS
- ADVANCE STEEL FOR CONNECTION DESIGN & DETAILING
- DYNAMO USAGE
- BIM 360 DESIGN PLATFORM SINGLE SOURCE OF TRUTH

### Demo 1 – Video

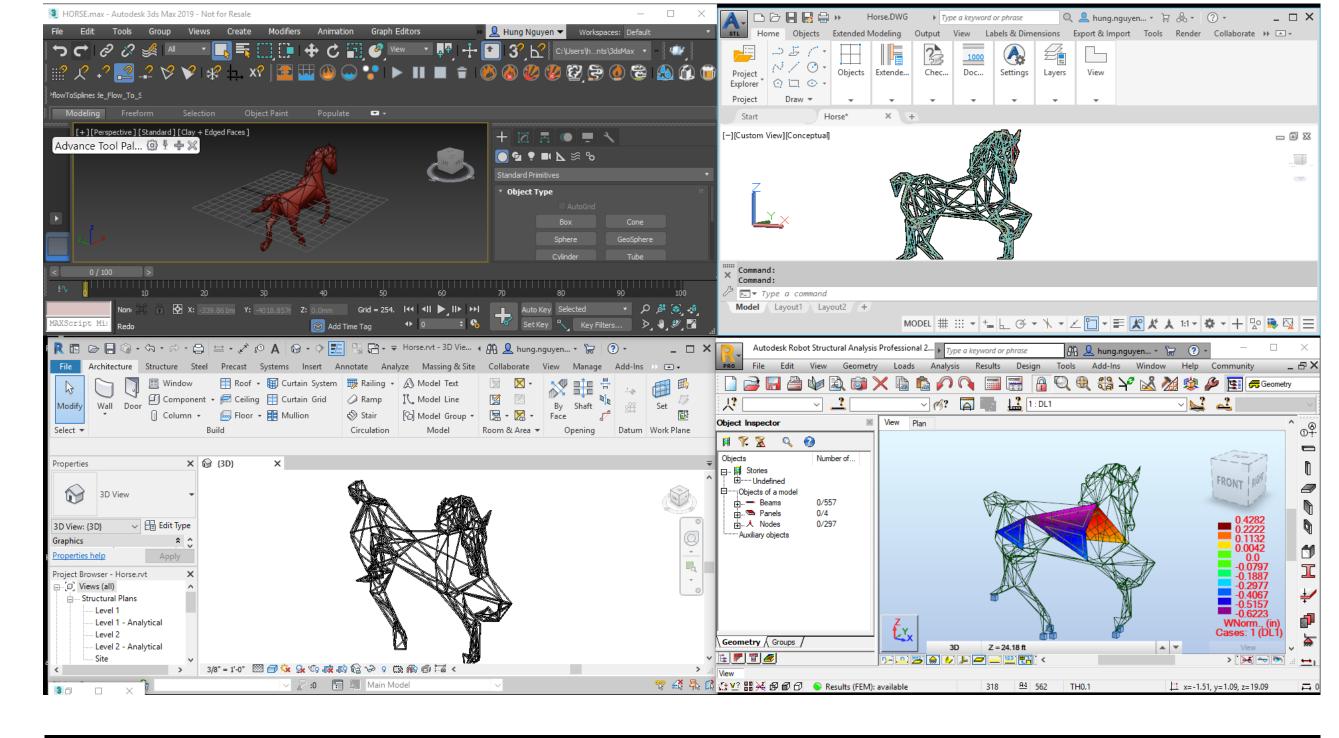


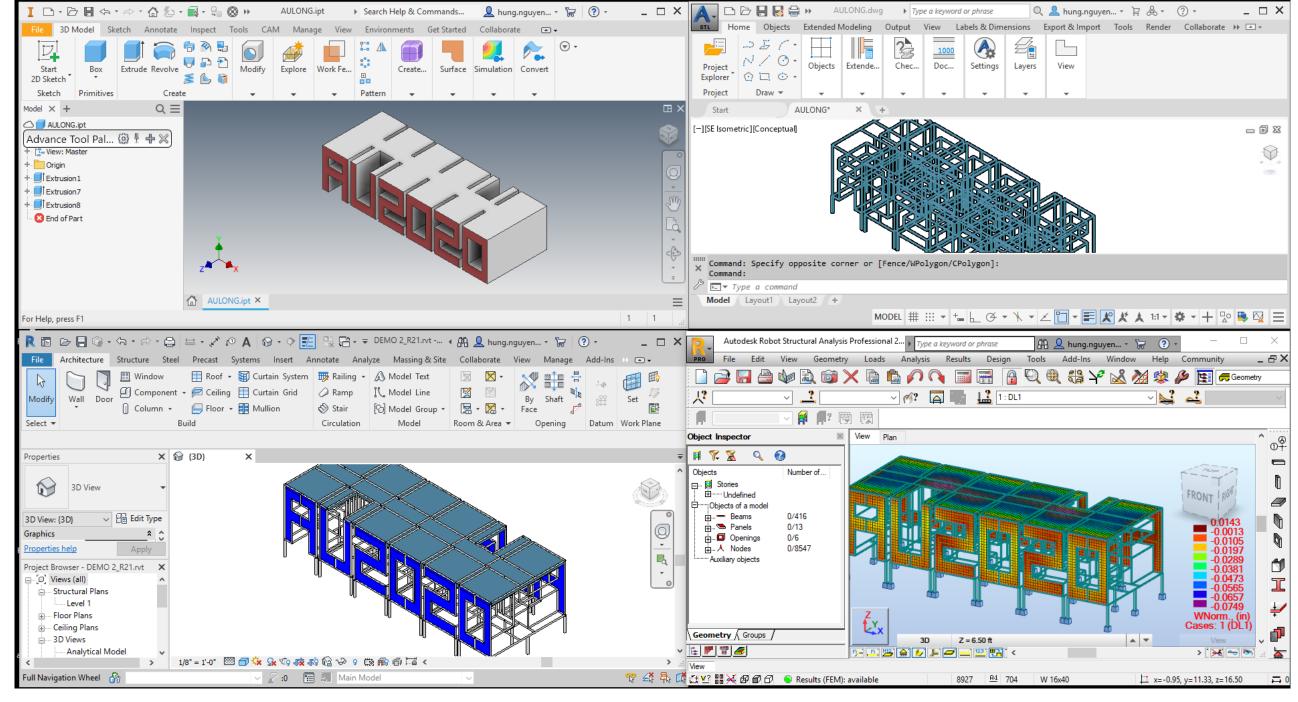
A Quick overview of Revit – Robot – Advance Steel – Dynamo on BIM 360

### **DEMO-2 FEATURES**

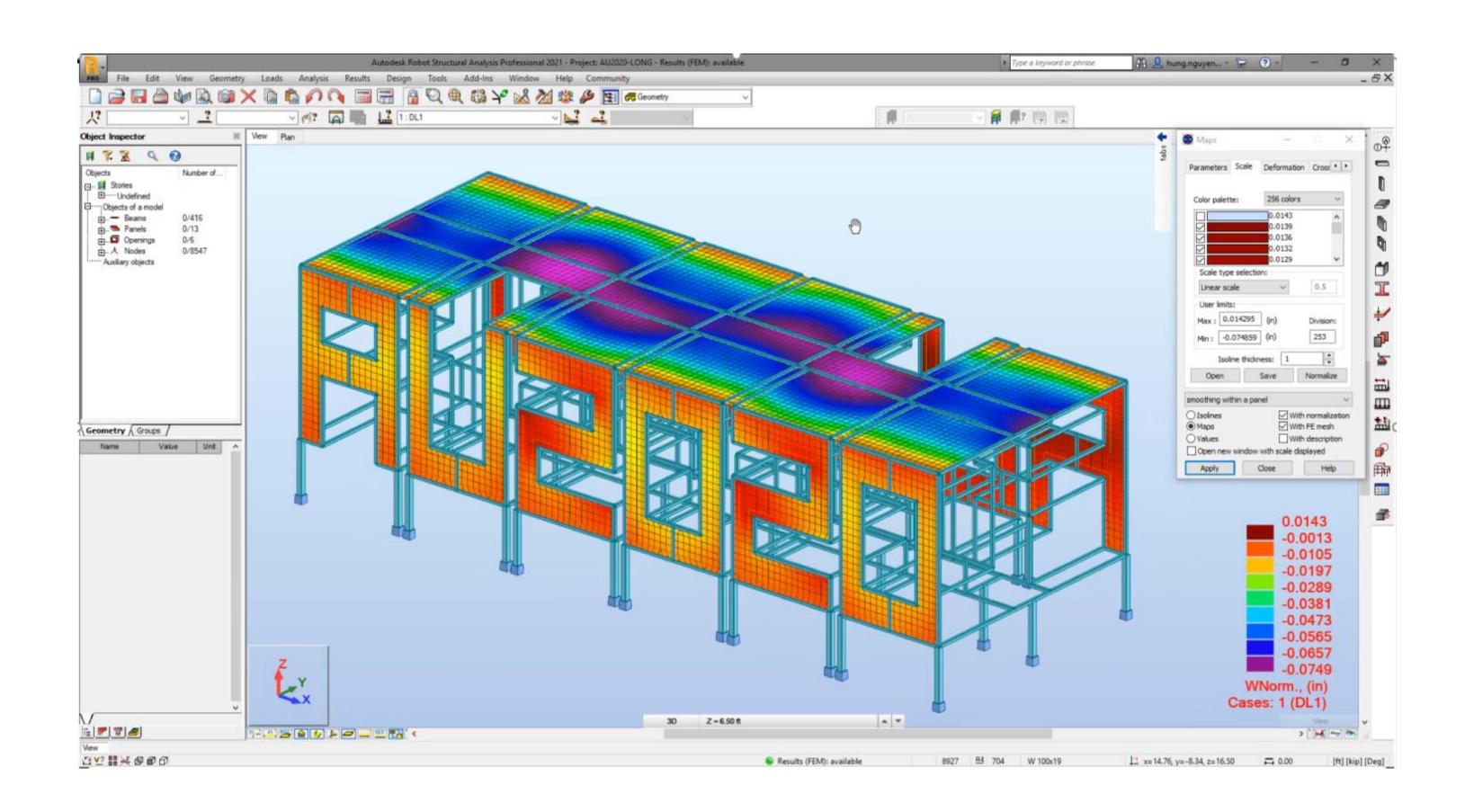
GOING BEYOND AEC WORKFLOW ON BIM 360

- 3DS MAX ADVANCE STEEL REVIT RSA WORKFLOW
- INVENTOR- ADVANCE STEEL REVIT RSA WORKFLOW
- VISUALIZING RSA RESULT IN REVIT





### Demo 2 – Video



Going Beyond AEC Workflow on BIM 360

"Whether I'm five feet from somebody or 2,000 miles away, the interaction is the same." "We are able to come up with more design, weed out issues, and continue forward (with the design)."

**Corey Ochsner, Fentress Architects** 





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