



Technology in Architectural Practice Open Forum

Local AIA TAP Chapters

May, 9th 2023



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Questions related to specific products and services may be addressed at the conclusion of this presentation.

Alexandra Pollock

Alexandra is Chief Technology Officer and Principal at FXCollaborative Architects, where she leads the firm's Digital Practice Group, overseeing design, information, and business technologies. Prior to her role in architectural technology, Alexandra was a practicing architect and remains a registered architect in New York.

Currently she is serving as a committee member for the national AIA TAP (Technology in Architecture Practice), and previously co-chaired the local AIANY Technology Committee.

A'23 AIA Conference on Architecture 2023
June 7-10, San Francisco



Moderator

**AIA | TAP
NEW YORK**

Cesar Escalante

Cesar leads storytelling efforts for the architecture industry—creating and evangelizing compelling content on new and emerging technologies to Autodesk customers worldwide. Cesar is a registered architect and spent the past 18 years in the architectural industry, holding design technology leadership roles at large international firms, including Gensler, HOK, and Flad Architects. He is a member of the AIA Technology in Architectural Practice (TAP) leadership council & a board member of the AIA San Francisco. He teaches BIM at the California College of the Arts.

A'23 AIA Conference on Architecture 2023
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AIA | TAP
SAN FRANCISCO

Benjamin Regnier

Ben Regnier is an architect and Design Technology Lead at Gensler with experience and knowledge in implementing advanced technology in architectural design, from building information modeling (BIM) and integrated project delivery to computational design, data visualization, and digital fabrication.

He is also the chair of the TAP Knowledge Committee in San Diego. In addition to his roles as a Design Technology leader, Ben has design experience in commercial office, aviation, educational, and civic projects, most recently on the Terminal 1 Replacement Project at the San Diego International Airport.



Brian Skowvron

Brian is a Senior Associate with Gruen Associates and the Director of Design Technology.

He oversees the planning, strategic management and deployment of a healthy cultural and technology-driven environment.

Co-chair of AIALA TAP (Technology in Architectural Practices) since 2021, he encourages LA based Technology Leaders to share their resources and experience.

A'23 AIA Conference on Architecture 2023
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**AIA | TAP
LOS ANGELES**

Mark Schmieding

Mark is the Director of Digital Practice at Goettsch Partners in Chicago.

He began his career at SOM in 1987 and gained a reputation for developing and implementing architectural design software. Because of this, he was recruited by the original Revit Technology Corporation and was part of the team that created the BIM software that changed the AEC industry.



Niknaz Aftahi

Niknaz is the CEO and founder at aec+tech.

All-in-one innovation platform and community connecting AEC/O (Architecture, Engineering, Construction & Operations) professionals with the latest tools and technologies.

Prior to launching aec+tech Niknaz practiced architecture in the bay area, California, both as a design professional as well as a design technology director.

Niknaz is passionate about technology and innovation in the AEC space, and she has been a keynote speaker at various international aec-tech events. Niknaz is a member of AIA San Francisco design technology committee and has also been developing curriculum and teaching architecture courses online to Bahai students in Iran who continue to be deprived of access to universities in their own country.



Brad Prestbo

Bradford J. Prestbo, FAIA, is advancing the profession through his practice, advocacy, and educational efforts in the use of cutting-edge design technologies, high-performance design, and the incorporation of maker culture into the design process. He has practiced internationally, is a sought-after speaker, is frequently interviewed, and is an educator via his detailing workshops, higher-education classes, design juries, and mentorship of emerging professionals.

A'23 AIA Conference on Architecture 2023
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**AIA | TAP
NATIONAL**



Cesar Escalante
AIA|TAP
SAN FRANCISCO



Benjamin Regnier
AIA|TAP
SAN DIEGO



Thesla Collier
AIA|TAP
NATIONAL



Brian Skowvron
AIA|TAP
LOS ANGELES



Mark Schmieding
FAIA|TAP
CHICAGO



Alexandra Pollock
AIA|TAP|NATIONAL
Moderator



Brad Prestbo
FAIA|TAP
NATIONAL



Niknaz Aftahi
AEC+TECH

AIA TAP | San Francisco

May, 9th 2023





2017 - SAN FRANCISCO DYNAMO USER GROUP

DUGSF is a non-profit serving a local community of programmers, developers, designers and practitioners interested in computational design, programming, and visual scripting.

5 years

SFDUG 2017 Chairs



Cesar Escalante, AIA
HOK



SoYoung Lee, AIA
HOK

1,300 audience

120 presentations

3,000 YouTube Subscribers

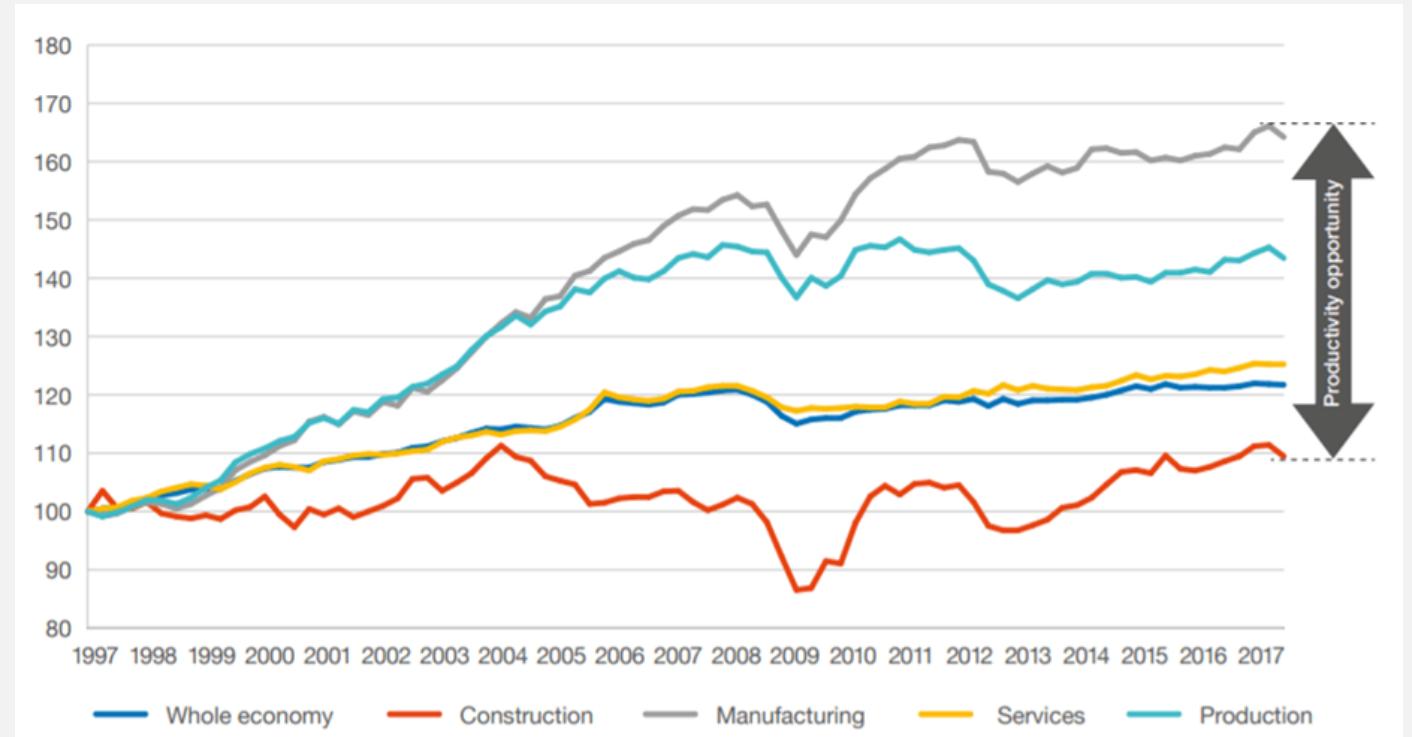
180 countries



AIA SAN FRANCISCO TECHNOLOGY IN PRACTICE KC

PROBLEM STATEMENT

The productivity efficiency has remained in decline for decades in the AEC industry as a result of **fragmentation**, antiquated and **inefficient** processes, and a **resistance** to technology change and adoption.



90%

digitalization will
transform the
industry

70%

those who don't
adopt will go out
of business

62%

AEC is behind
other industries



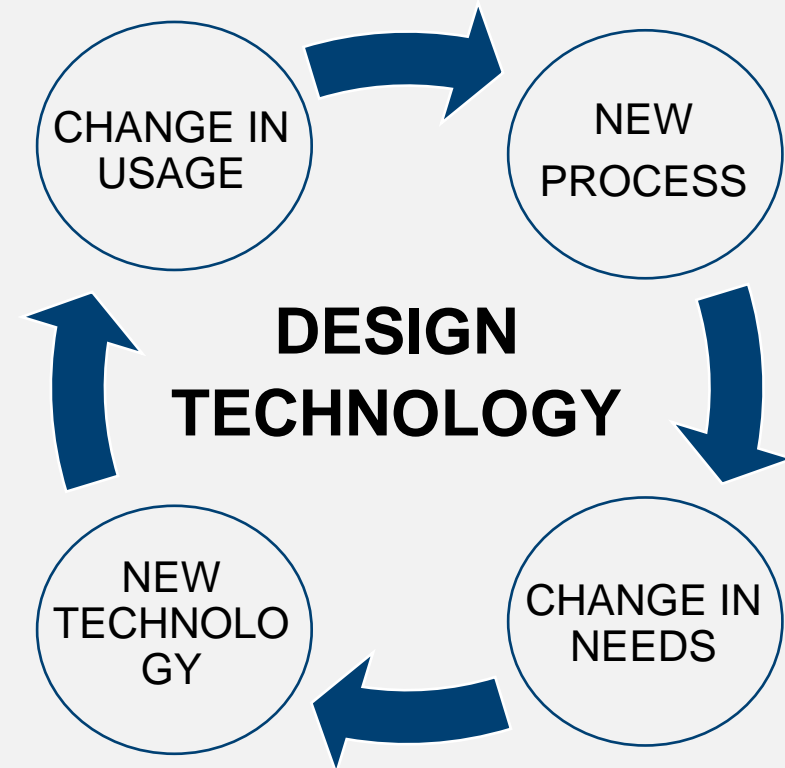
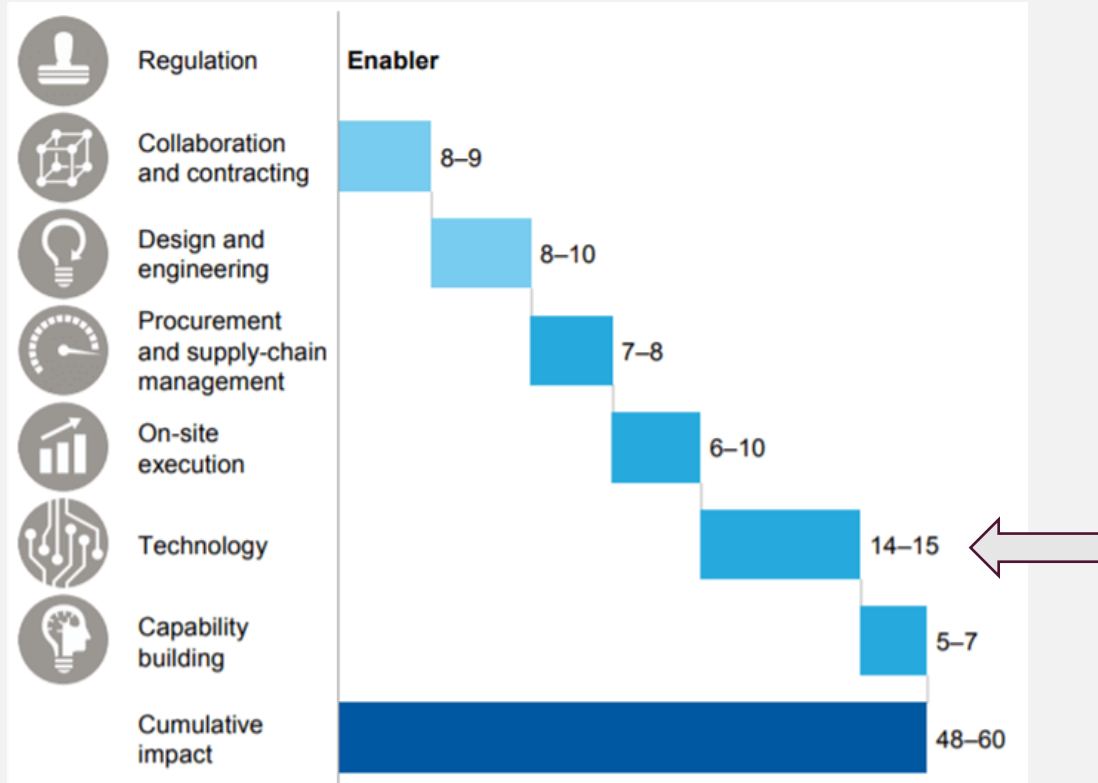


AIA SAN FRANCISCO TECHNOLOGY IN PRACTICE KC

THE ROLE OF DESIGN TECHNOLOGY

It is our role as technologists to become agents of change in the promotion, dissemination, and adoption of new design technologies to move us into the digital era.

Percentage of Global Productivity Improvement by Enabler



Source: McKinsey – Reinventing Company: A Route to Higher Productivity, 2018



AIA SAN FRANCISCO TECHNOLOGY IN PRACTICE KC MISSION

The **AIASF Technology in Practice KC** works to **inform** and advance the understanding of design technology and its impact on the built environment. The committee helps to promote and **accelerate** digital transformation of AIA's local communities through **dialogue** and adoption of **technologies** enabling new processes and experiences.



AIA SAN FRANCISCO TECHNOLOGY IN PRACTICE KC ALIGNMENT WITH THE AIASF GOALS

In alignment with the AIASF Strategic Plan, we are moved by the same values honoring **Community, Relevance, Public Benefit, and Leadership.**



Matt Staublin, AIA
AIASF Board Liaison



Annabelle Udo-O'Malley
AIASF Public Programs



Collaborate

- Build collaborative and inclusive public programs
- Increased collaboration with AIASF and cross-committees
- Assistance and guidance via staff liaisons



Advocate

- Discuss regulation requirement of technology adoption
- Inform of ongoing standards and open source resources
- Create a community-based culture



Advance

- Connect and provide programs for the AIASF members and public at large
- Strengthen the AIASF as valuable resource of information





AIA SAN FRANCISCO TECHNOLOGY IN PRACTICE KC COMMITTEE STRATEGIC GOALS



Educate

Impact of disruptive technologies in AEC industry



Integrate

Vertical integration of tools and processes in the building life-cycle



Dialogue

Regulations and requirements of new technology

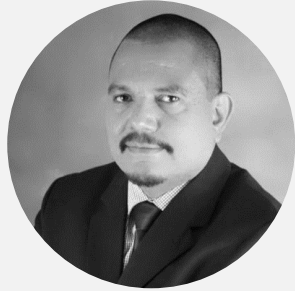


Accelerate

Digital transformation of the local communities



AIA SAN FRANCISCO TECHNOLOGY IN PRACTICE KC FOUNDING COMMITTEE MEMBERS



Cesar Escalante, AIA
HOK
Chair



Gabriele Sorrento
MINDESK



Rotimi Seriki, Assoc AIA
HOK



Myoung Kang
ATELIERAVANT



Enrico Chionna, Intl. AIA
HELLER MANUS



Thomas Simmons
ARCHVISTA



Tony Rinella
bimSCORE



SoYoung Lee, AIA
HOK
Co-Chair



Zig Rubel, FAIA
A Design+Consulting



Jennifer Lew, RA
SFCDI



Dennis Eldrige, AIA
JOIN



Dave Alpert, FAIA
GEOPOGO



Adam Rendek, AAIA
DPR



Michael Hoppe
GEOPOGO





AIA SAN FRANCISCO TECHNOLOGY IN PRACTICE KC 2023 LEADERSHIP ROLES



Al Dram
Drams Tech
Chair



Argelia Barcenas
Gensler
Co-Chair



Jennifer Lew, RA
SFCDI
Marketing



Stephanie tab
SOM
Secretary



Brandon Nuckelt
MBH
AIA Liason



AIASF DESIGN TECHNOLOGY COMMITTEE

ACTIVE COMMITTEE MEMBERS

| Name | Company |
|------------------------|---------------------|
| Adam Rendek | DPR |
| Annabelle Udo-O'Malley | AIA |
| Cesar Escalante | AUTODESK |
| Dave Alpert | GEOPOGO |
| Dave Monk | ARCHSOURCE |
| Dennis Eldridge | JOIN |
| Douglas Smith | WOODSBAGOT |
| Enrico Chionna | HELLER MANUS |
| Eric Stimmel | SOM |
| Gabriele Sorrento | MINDESK |
| Jennifer Lew | HKIT |
| Kat Park | SOM |
| Mark Perry | HOK |
| Matt Staublin | AIA |
| Michael Hoppe | GEOPOGO |
| Myoung Kang | ATELIERAVANT |
| Rotimi Seriki | HOK |
| SoYoung Lee | |
| Thomas Simmons | ARCHVISTA |
| Tony Rinella | SBI |
| Zig Rubel | A Design+Consulting |



AIA SAN FRANCISCO TECHNOLOGY IN PRACTICE KC WORKPLAN

To meet the committee goals, the technical committee will schedule the following activities throughout the year



DT Public Program

Speaker engagements by subject matter experts



SF Design Technology Symposium

Annual local conference about Design Technology



Annual Workshop

Annual hand-on training on cutting-edge technologies



Technology Toolkit

Information Package



AIA SAN FRANCISCO TECHNOLOGY IN PRACTICE KC

MONTHLY DESIGN TECHNOLOGY MEETUP

01

Summary

A monthly meetup co-hosted by the SFCDI that expose to the public about the new trends in technological and delivery innovations. Top of the industry subject matter experts are invited to present the result of their work, research or product development.

02

Impact

- Facilitate monthly presentations about Design Technology topics
- Educate the local community about new technological trends
- Promote the dialog about the existing and ongoing initiative to standardize and regulate a technology in the frame of the AEC practice

03

Deliverables

- **Monthly meetings open to the public**
- When: Third Wednesday of every month.
- Lunch
- Recording of the meet-up
- 1 unit, AIA CE Accredited

04

Resources

- Attendance: 20-70
- Admission: \$10
- Venue: AIA SF Conference Room
- Marketing via AIA Website and Monthly calendar



AIASF DESIGN TECHNOLOGY COMMITTEE

SF DESIGN TECHNOLOGY SYMPOSIUM

01

Summary

The symposium is a half-day conference that brings together AEC professionals, owners/operators, and innovators to explore new trends in design technology and the built environment.

02

Impact

- Discuss best practices for vertical integration and multidiscipline coordination.
- Understand how software and services change the way we complete the life cycle of buildings.
- Discuss best practices for interoperability
- Understand how new technology shapes the way designer's present and visualize work.

03

Deliverables

- 1/2-day Symposium
- 15 Speakers
- When: Early Fall
- Coffee Break
- 4 unit, AIA CE Accredited

04

Resources

- Attendance: 150
- Admissions: \$25-\$90
- Venue: Autodesk One Market Gallery, TBD
- Marketing via AIA Website and monthly calendar





AIASF DESIGN TECHNOLOGY COMMITTEE ANNUAL WORKSHOP

01

Summary

This annual event is a hands-on workshop delivered by subject matter experts about a cutting-edge technology. It will provide the community with an opportunity to advance their skills and understanding of a new process or technology.

02

Impact

- Enable local practitioners in the use of a new processes, workflows, or technology
- Facilitate and accelerate the adoption of disruptive technologies
- Provide access to top-notch subject matter experts
- Elevate the technical skills of the local community

03

Deliverables

- Annual workshop open to the public
- When: Summer, starting 2021
- Meals, TBD
- AIA CE Accredited

04

Resources

- Attendance: 15-24
- Admission: TBD subject to length and instructor honorarium.
- Venue: AIA SF Conference Room
- Marketing via AIA Website and monthly calendar



AIA TAP | San Diego

May, 9th 2023



TAP San Diego: **What is a TAP?**

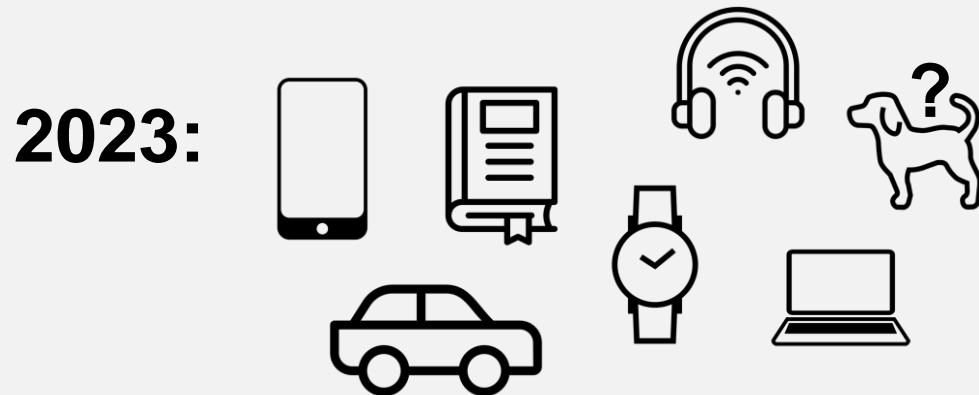
San Diego has been holding TAP meetings and events since 2018. These have been social events, learning opportunities, and tours – sound familiar?

What makes TAP an essential part of the AIA community?

3 Thoughts after nearly 5 years:

1: Technology is in **everything**

Things plugged in to charge when I go to bed:



The Lesson:
Every audience has
a technology story

1: Technology is in everything



AIA
SAN DIEGO

TECHNOLOGY IN ARCHITECTURAL PRACTICE

REAL WORLD REMOTE WORKING

The San Diego TAP Committee surveyed dozens of local architects and designers over the course of four days, to find out how the last six months of remote working has been... well, working. Here are some of our findings, tips, and tricks, straight from the mouths of our colleagues:

REMOTE SOCIAL EVENTS ARE... ACTUALLY KIND OF OK?

Most of you have only had a few remote parties on your calendar this year, but the general consensus is that they've been (surprisingly) enjoyable.

The key to this is that, similar to remote meetings, remote social events need lots of structure. We may not love videoconferencing, but trivia? interviews? bingo? These we like. Perhaps when it's more difficult to get together, when we do we try a little harder and value it a little more. Sounds like a great lesson for 2020.

REMOTE LIFE REQUIRES MORE MEETINGS, BUT DON'T DESPAIR.

Our respondents indicated a slight uptick in quantity and frequency of meetings, but also reported general satisfaction with their meeting load. It's hard not seeing each other and getting work done, and we compensate for unstructured collaborative time by meeting more often.

TIP: In order for meetings to function over videoconference, additional structure is needed in order to keep things on track. Strategies used by our members include:

- Clearly articulated agendas communicated ahead
- Defined leadership of meeting agenda with "stay on mute" policy"
- Keep the objective short and sweet, and keep the tone positive -- easier in a short meeting :-)
- Thorough tracking of action items is even more important than complete minutes

WE LOVE THE COMFORTS OF HOME BUT WE MISS EACH OTHER

This one seems obvious, right? We love having access to our kitchens, our pets, and our families during the work day, and taking those morning meetings in our pajamas. But not seeing your coworkers in person gets pretty old after a while.

Our members also reported that, on average, they feel **more** productive at home than in the office. Here's a good exercise: write down 10 things that make you more happy and productive at home. How can you bring these things to the office?

SOME CRITICAL EQUIPMENT CAN IMPROVE YOUR WORKING DAY

Most of you were reasonably content with your home setup, but some basic home-office improvements can make things sing:

- A dedicated second screen was deemed crucial by many (even if it's stored under the kitchen table)
- PDF markup tools like Bluebeam are even more critical than they were before
- Tablet use is on the rise, including tools such as Morpholio or Concepts to sketch with limited desk area

ARCHITECTS ARE BEHIND THE CURVE ON COLLABORATION TOOLS

In other creative disciplines collaboration software is commonly used to aid in communication and project management. These tools vary from chat-based platforms like Slack, to more structured collaboration systems like Basecamp and Trello. Very few of the architects polled said they used such software, and many of you report using text messages as a primary means of communication. Get your sanity back and try some new tools!

TIP: Unsure but want to dip your toes in? Many of our respondents reported using Microsoft tools for chat. Teams and Planner may be built into your Office license for free, and are a great

Technology can be
about our daily lives
(especially in a
global pandemic)

1: Technology is in everything

WOMEN IN DESIGN TECHNOLOGY: A COLLABORATION BETWEEN WIA AND TAP

Thursday, June 25, 2020

12:00 PM – 1:30 PM

Google Calendar · ICS

**Technology can be
about opportunity**



**Women in
design technology**
a collaboration between WIA + TAP

Showcasing experts in the field, increasing visibility for women in technology roles, and starting conversations around these topics.

register today
<https://attendee.gotowebinar.com/register/7867163334381875472>

Thursday, June 25, 2020
12:00pm-1:30pm
FREE / ALL are welcome

 **AIA San Diego**
Women In Architecture

 **TECHNOLOGY IN
ARCHITECTURAL
PRACTICE**

It is no secret that being an architect also means navigating how to integrate technology into your practice. Join us for a panel discussion showcasing five women who are experts in their different areas of design technology. As a collective, our panelists are developing parametric tools for Rhinoceros, leading design studios to meet client expectations, integrating VR into the design process, leading construction BIM management, and orchestrating construction processes with VDC.

Reasons to virtually attend:

1. Be inspired by five innovative women
2. Gain resources to become more of an expert yourself
3. Submit questions for the panelist during the discussion
4. You don't know what VDC is...

Five more reasons to attend? These amazing panelists:

Stacy Cannon, Principal, Gensler San Diego

Rajaa Issa, Software Developer with McNeel & Associates, Former Faculty, NewSchool of Architecture & Design

Kathryn Knight, VDC Manager, DPR San Diego

ing

Talita Barão Mathias- Associate, HMC Architects San Diego

Katerina Milovanoska, BIM/VDC Director, Gafcon

2: Our value is in **condensing time** through deep consideration

In most surveys, interviews, and discussions, one of the constant concerns we hear from architects is about a **lack of time.**



The Lesson:

We all desperately need trusted sources of straightforward information. For technology, this must come from our peers.

2: Our value is in **condensing time** through deep consideration

TAP Office Hours
August 24, 2021

Today's Topic:
Real-Time Rendering

Logos: Unreal Engine, Unity, NVIDIA Omniverse, AIA San Diego, Technology in Architectural Practice


Intro Question

How do you use renderings in your practice?


Are you seeing a change in client expectations with visualization?

What aren't you doing that you wish you could?


MEET OUR EXPERTS




Garrett van Leeuwen
Gensler



Karl Kachele
Gensler



Tommy Ross
Domus Studio



Ben Regnier
Host

Different Needs, Different Tools

Let's start with some context...

There are many tools with different capabilities, workflows, and cost points in this space. There is no "magic bullet" program to choose as the arms and services differ greatly from firm to firm, some of the important questions to ask are:

1. What **features** do you need? What expected level of quality do you have? Are you going to make videos? Will it be used for coordination? Presentation? More?
2. How much **complexity** do you want? Is anything from a separate software (Revit) or do you want a single tool that does everything (BIMBA)?
3. How much do you want to **spend**? Is this something you'll be proceeding to many people or only visualization specialists? How comfortable are you with 100% subscription?

Diagram: A circle with 'FEATURE RICH' at the top, 'EASY TO LEARN' on the right, and 'LOW COST' at the bottom. Inside the circle are icons for Revit, Lumion, Enscape, and Twinmotion.

Case Study 1: SDSU Arnes Stadium


Lumion

Revit/Sketchup/Rhino >>> Lumion >>> Photoshop

Use for imagery: live client presentation, public release, marketing, community events as well as still renderings.

Videos featured animated entourage.

All visualizations used a single Lumion scene that was developed throughout the project.



Case Study 2: USC Student Union

Enscape

Revit >>> Enscape >>> Photoshop

Use for imagery: live client presentation + still images and fly through animations.

Revit was used starting in 3D phase and used with Enscape for design & documentation consistently throughout the process.

Standalone Enscape models were exported and shared with Consultants so that they could easily visualize the project in 3D. Many time consultants never see a project in 3D, so it was very helpful for them to understand all conditions and design intent.



Case Study 3: UCSB Global Library / Chiles / Performing Arts School

Unreal Engine

All of these images are screen grabs from live meeting presentations made from models produced in Revit and exported to Unreal.



Case Study 4: Christ Our Savior Catholic Parish & St. Edward the Confessor Catholic Church

TwinMotion

These formal renderings and videos were produced directly from a TwinMotion render using models developed in Revit.



Q+A

What do you want to know?

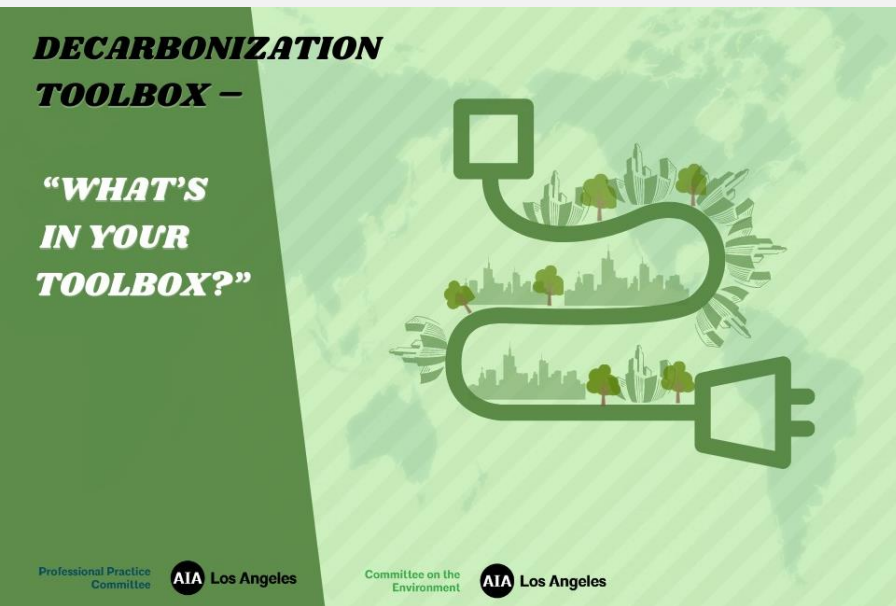
Stump our team!

| Question | Insight |
|---|--|
| How can we use Revit to create a better presentation? | Revit is a powerful tool for creating a better presentation. |
| How can we use Revit to create a better presentation? | Revit is a powerful tool for creating a better presentation. |
| How can we use Revit to create a better presentation? | Revit is a powerful tool for creating a better presentation. |

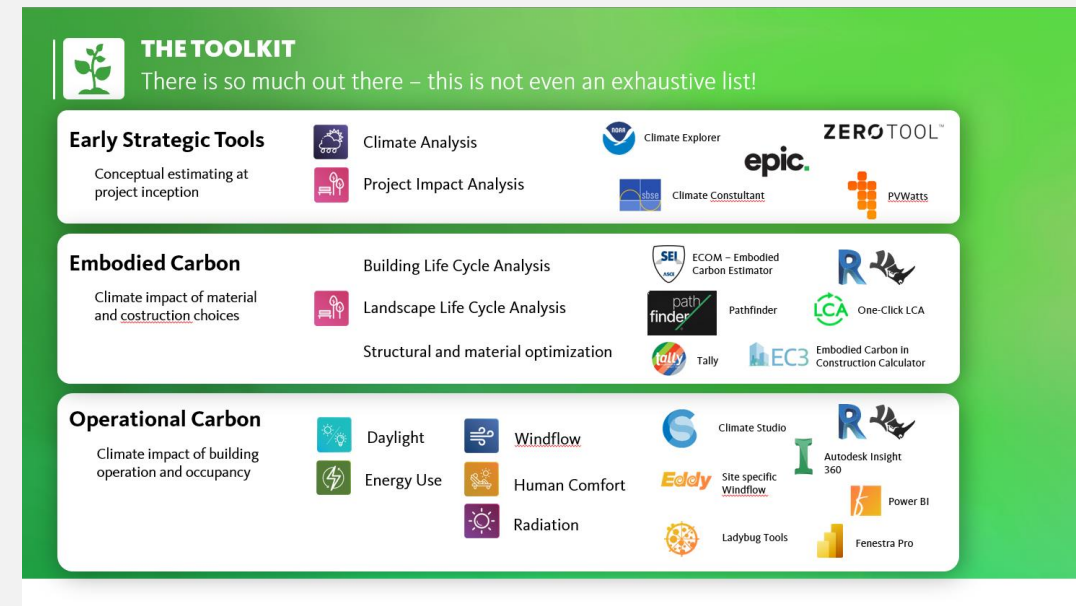
Learning curve, World View, AR / VR, Issue, Warning

Simple topics, direct from our colleagues, is a great staple food. We are all experts, we are all resources.

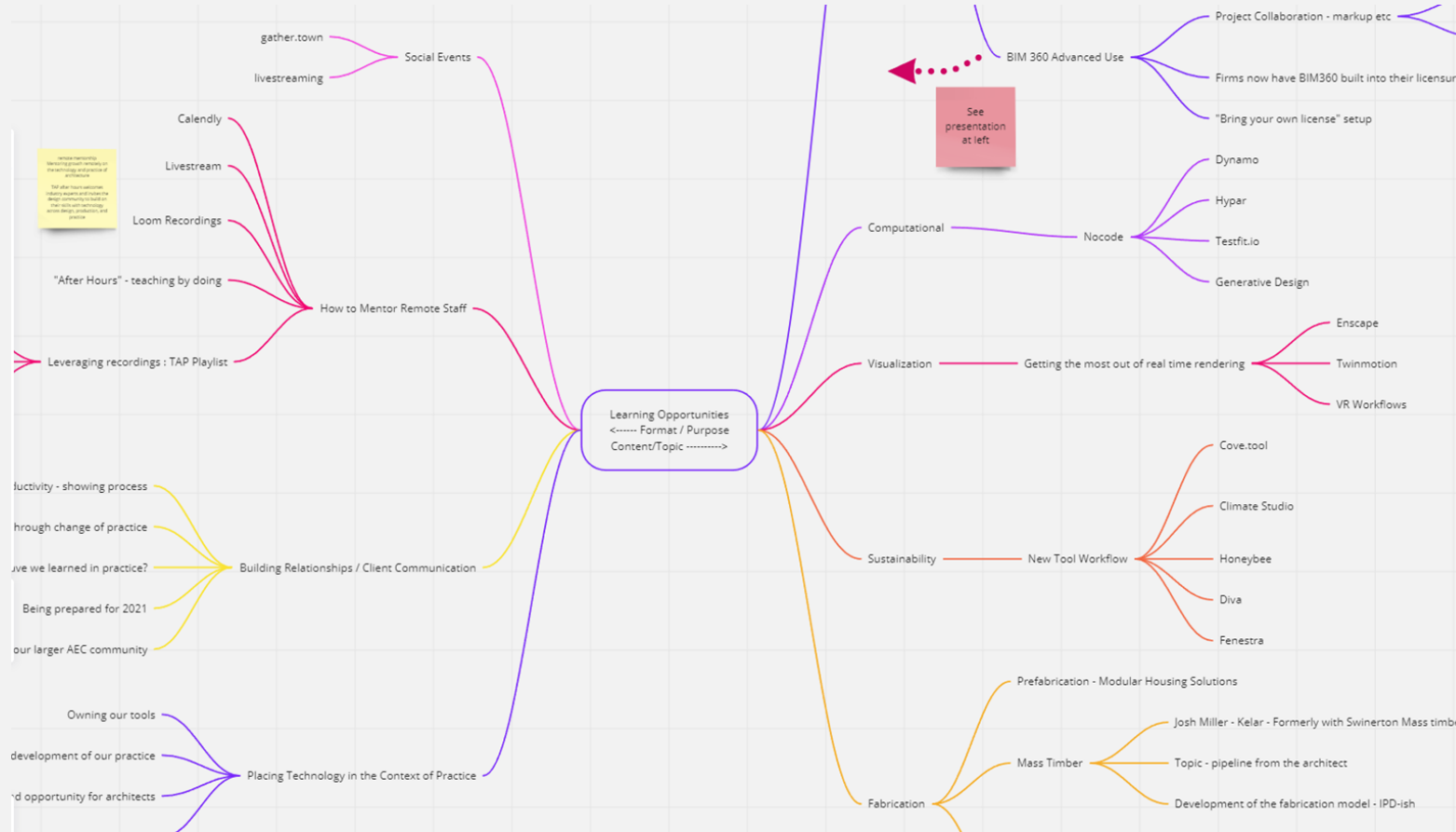
2: Our value is in **condensing time** through deep consideration



Partnerships can be great generative resources; TAP has key business with every other committee at the AIA.

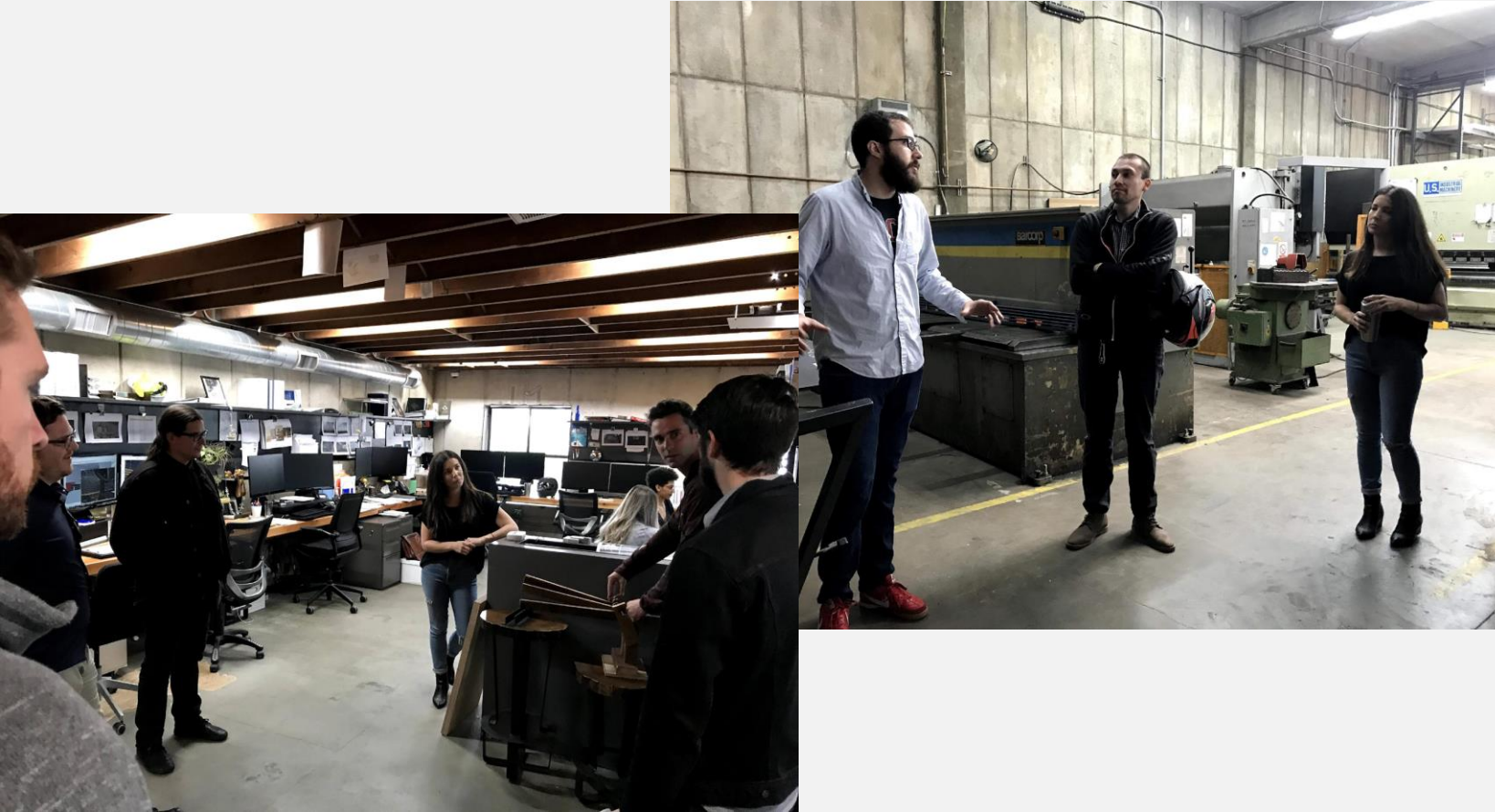


3: Our assets are our **connections** and our **conversations**



The Lesson:
We started out thinking we were a resource of knowledge, it turned out we were a conduit for more precise communication

3: Our assets are our **connections** and our **conversations**



Technology can be a fantastic way to talk about process, whether it's high-tech or low-tech.

3: Our assets are our **connections** and our **conversations**



Technology is also a natural bridge to make connections to our partners in design and construction. How do the tools we use to share shape the way we collaborate?

How does TAP work in practice?

I've noticed that people might be a little bit anxious about this AI thing. Let's use that as a thought experiment on how TAP is relevant, using these concepts:

1. **Technology is in everything:** while most architectural conversations have been focused on image generation, the most disruptive aspects of machine learning might be in project management, or specifications. **Have we talked with everybody?**
1. **Condensing time:** The signal to noise ratio in "AI" news is awful. **TAP is the only place to get accurate information about how AI is impacting architectural practice, right now**, because the only accurate information is what people are currently doing.
1. **Connections and conversations:** there is absolutely no need to rely on experts to explain the impact of AI tools on our work. The rate of development is such that most of those "experts" are out of touch, anyway. **Peer discourse is the best way to get to the current truth.** We don't need to go outside this room for answers.



AIA TAP | Los Angeles

May, 9th 2023



What is TAP to us?

- Taking actionable steps to influential technology
- Engaging our Community
- It's about supporting each other and pushing each other to be better
- Driving the Future
- Giving Back



AIA|LA TAP

TECHNOLOGY IN ARCHITECTURAL PRACTICE (TAP) WHAT IS TAP?

-Office

HARDWARE

-Collaboration

BIM360/ACC

-Revit

HELPFUL PLUGINS

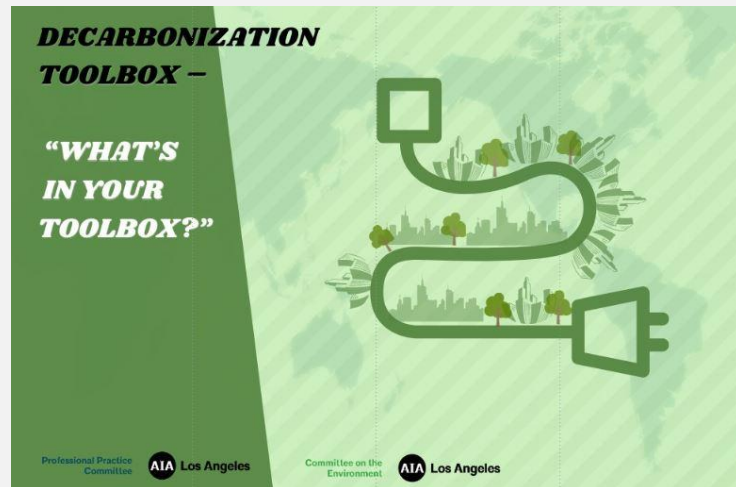
-VR/AR

ENSCAPE, TWINMOTION



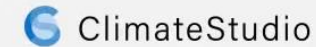
DECARBONIZATION TOOLBOX – “WHAT’S IN YOUR TOOLBOX?”

a TAP collaboration with COTE



Tools to get the job done?
How to get your client aware?
How can a small firm get solutions?

Tool Chest



Los Angeles Technology Conference '23

PEOPLE, PROCESSES, AND PRACTICE: TECHNOLOGY + THE BUSINESS OF DESIGN



- Organized by Practice and TAP Committees
- 3rd Annual event, first in person
- 5 sessions, followed by 4 breakout rooms
- Brought the firm back to the forefront

Practice Disrupted from Practice of Architecture

episode 105

Evelyn Lee and Je'Nen Chastain

-People are the most important part of any design studio

- Burnout
- Loss of talent
- Successful business models
- Culture



metrics to
RETIRE

long nights
overworked
under valued
lack of trust
poor communication
disengaged employees
unhealthy competition
scope creep

metrics to
EMBRACE

values based
built on trust
open & transparent
drives agility
celebrates wins
empowered employees
low turnover
healthy boundaries

Troy Barbu

Technology Implementations Case Studies



- Participation from the Top
- Understand ROI
- Alignment
- Discuss Tactics for Change Management
- Guidelines to create and execute a Corporate Training Initiative

Jason Rostar

Automate the Mundane

How quickly does this work? *Less than an hour*

Test Project

(4) Disciplines

- Structural
- Architecture
- Mechanical
- Electrical

(59) Levels

- 55 Levels Above Grade
- 4 Levels Below Grade

Results

6,962 Views

- w/ View Templates
- Organized & Named
- Cropped by Scope Box

2,313 Sheets

- Named & Numbered
- w/ Sheet Notes & Legends
- w/ Plan Views placed

- Automation of tasks
- Project setup (Revit)
 - consultants
 - sheets
 - views
- New interfaces and infrastructure

Leo Salce

Demystifying AI for A&E

-AI Overview & Subsets

ChatGPT

-Practical Applications

Space Planning

PowerBI

-Case Studies

Language translation

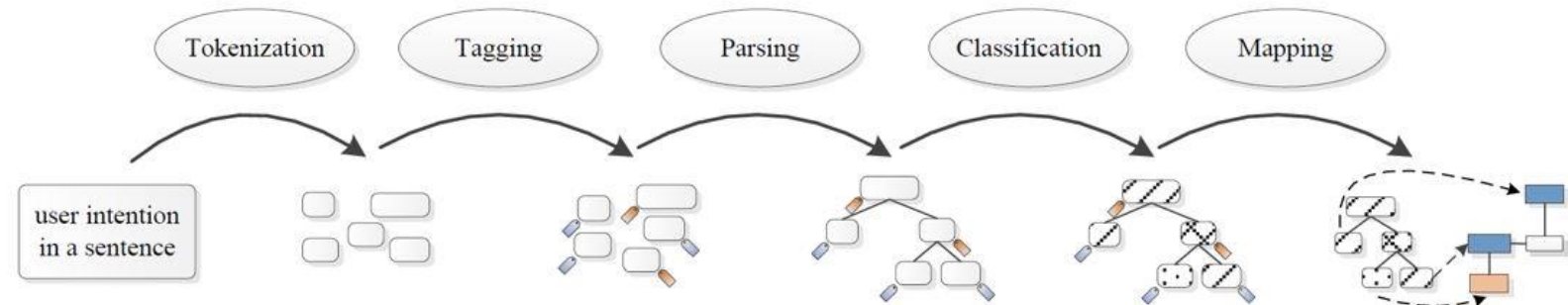
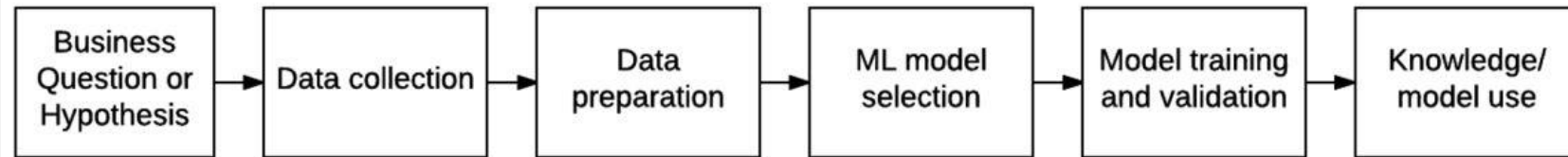
-Generative AI

Midjourney

-Future Predictions

Text to...

APPLYING MACHINE LEARNING (ML)



2023

DEMYSTIFYING AI FOR A&E – FROM BUZZ TO PRACTICAL USE

AIA/LA TAP

DESIGNING WITH DATA: THE TRANSFORMATIVE POTENTIAL OF AI ON ARCHITECTURAL PRACTICE

-Office Headset

NOISE ISOLATING VS NOISE

CANCELLING

-Meeting Notes

FIREFLIES

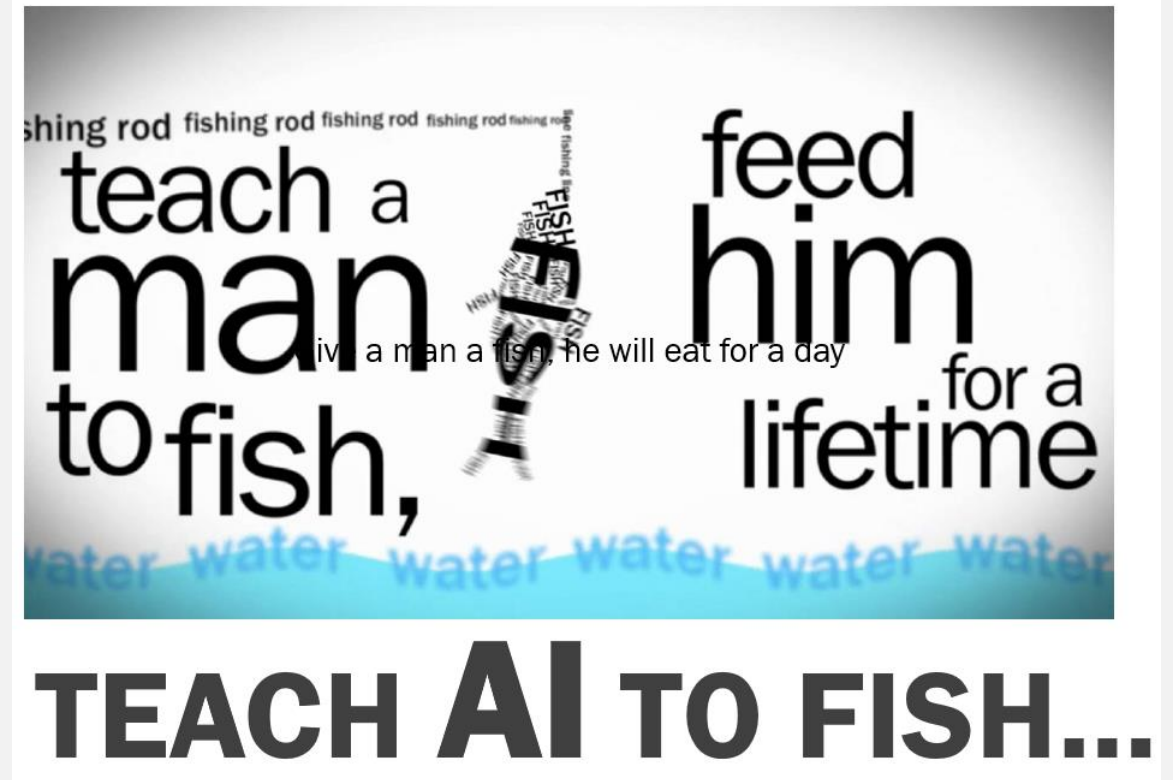
OTTER

-Visuals

DALL-E, MIDJOURNEY, DRAGGAN,
PHOTOSHOP

-Office Tasks

CO-PILOT, CHAT GPT



AIA|LA TAP



Brian Skowvron, Assoc. AIA
Director of Design Technology
Senior Associate
Gruen Associates



Chunxiao Wang, AIA, LEED AP
Project Architect
Associate
AXIS/GFA Architecture + Design



Thesla Collier, IA.AIA, CSI CDT
Studio Design Technology Manager
Senior Associate
Gensler



Josh Weiss
Director of Operations & Security
Logic TCG



Sam Keville
Studio BIM Leader
NBBJ



Nicole Buhles, Assoc. AIA, CM-BIM
Practice Technology Leader
Associate
HED



Alex Ault
Senior BIM Specialist
JBB



Melvin Williams, III
Regional Practice Technology Leader
Associate
HKS



Mallery White,
Vice President of Consulting – West Coast
Microdesk

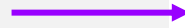
AIA TAP | Chicago

June, 9th 2023



AIA Chicago TAP

3 Tracks / 2 Committee Members per Track



Technology in Architectural Practice (TAP)

Studio Software:
Mark Schmieding
Darya Stefanovic

Technology Management:
David Ivey
Katy Liang

Advanced Technology:
Anthony Viola
Hiram Rodriguez

Schedule 2023

January

February

March

Webinar (SS)
BIM Tips for Small
Firms - Feb. 28th

TAP Open Planning
Meeting @ (Office?)
Mar. 21

April

May

June

Webinar (TM)
AI In Architecture
Apr 18th

Orbital Stack
Tues, May 23rd noon

TAP Networking Event
Next/Now Office
Thursday, June 22th

July

August

September

Webinar (AT)
Machine Learning
July 18th

TAP Open Planning
Meeting @ (Office?)
Aug 22nd

Webinar (TM)
Topic?
Sept 19th

October

November

December

TAP Symposium
CAC Space ?
Oct. 24/25

Webinar (SS)
Topic?
Nov 21st


AIA Chicago TAP Sponsor benefits:

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- Recognition on designated event communications (where applicable)
- Recognition at each event and/or activity
- Two complimentary tickets to events (where applicable)
- Market sector exclusivity for the designated TAP Sponsors

A'23 AIA Conference on Architecture 2023
June 7-10, San Francisco


AIA Chicago TAP

Studio Software



Studio Software
Mark Schmieding, FAIA
Goettsch Partners


→



Studio Software
Darya Stefanovic, AIA
JGMA

→

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June 7–10, San Francisco



Chicago Technology in Architectural Practice (TAP)

Studio Software:
Mark Schmieding
Darya Stefanovic

Technology Management:
David Ivey
Katy Liang

Advanced Technology:
Anthony Viola
Hiram Rodriguez

Schedule 2023

| | | |
|--|---|--|
| January | February | March |
| | Webinar (SS) BIM Tips for Small Firms - Feb. 28th | TAP Open Planning Meeting @ (Office?) Mar. 21 |
| April | May | June |
| Webinar (TM) AI In Architecture Apr 18th | Orbital Stack Tues, May 23rd noon | TAP Networking Event Next/Now Office Thursday, June 22th |
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| October | November | December |
| TAP Symposium CAC Space ? Oct. 24/25 | Webinar (SS) Topic? Nov 21st | |

AIA Chicago TAP

Technology Management




Technology Management
David Ivey,
HOK



Technology Management
Katy Liang, AIA
SmithGroup



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**AIA Chicago**

Technology in Architectural Practice (TAP)

Studio Software:
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Darya Stefanovic

Technology Management:
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Anthony Viola
Hiram Rodriguez

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Meeting @ (Office?)
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TAP Networking Event
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Thursday, June 22th

Webinar (TM)
Topic?
Sept 19th

AIA Chicago TAP

Advanced Technology



Advanced Technologies
Anthony Viola, AIA
Adrian Smith + Gordon Gill Architecture



Advanced Technologies
Hiram Rodriguez,
Gensler



A'23 AIA Conference on Architecture 2023
June 7–10, San Francisco



Technology in Architectural Practice (TAP)

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Darya Stefanovic

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Nov 21st

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Receive our biweekly newsletter and other Chapter updates.

First Name


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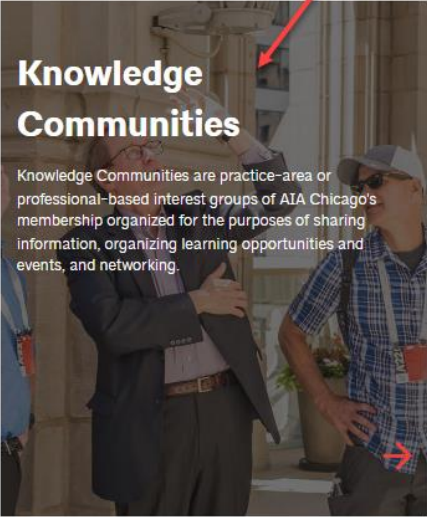




Get Involved

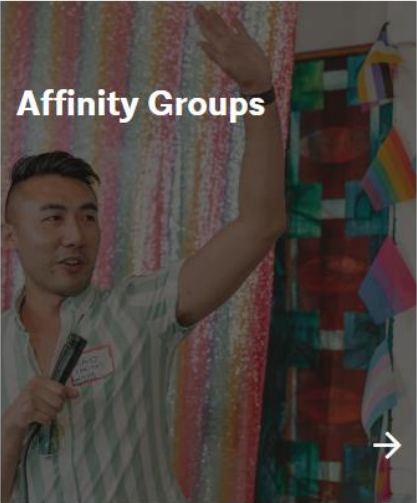
Make the most of your membership

Share your passions and knowledge while working to advance the profession and your work. No matter your interest, there are many ways for you to find your niche.

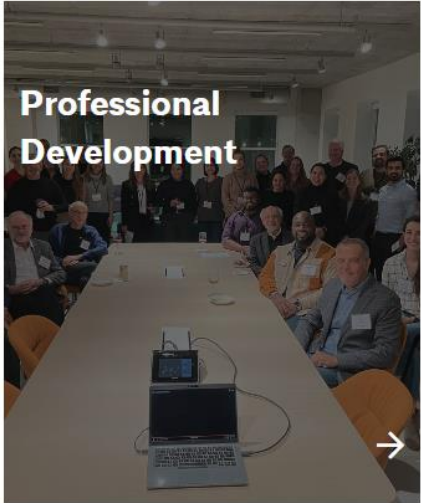


Knowledge Communities


Knowledge Communities are practice-area or professional-based interest groups of AIA Chicago's membership organized for the purposes of sharing information, organizing learning opportunities and events, and networking.




Affinity Groups




Professional Development



College of Fellows



Volunteer With Us

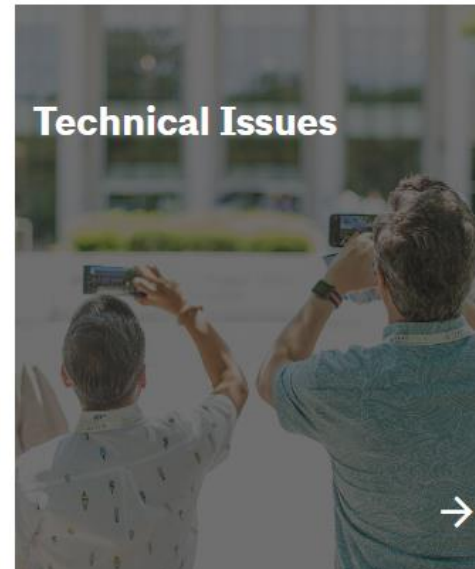
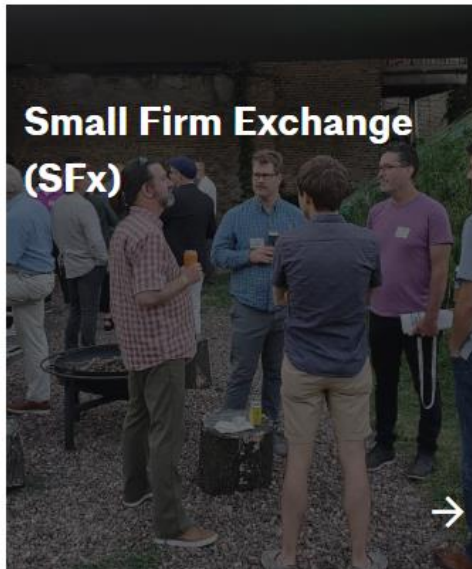
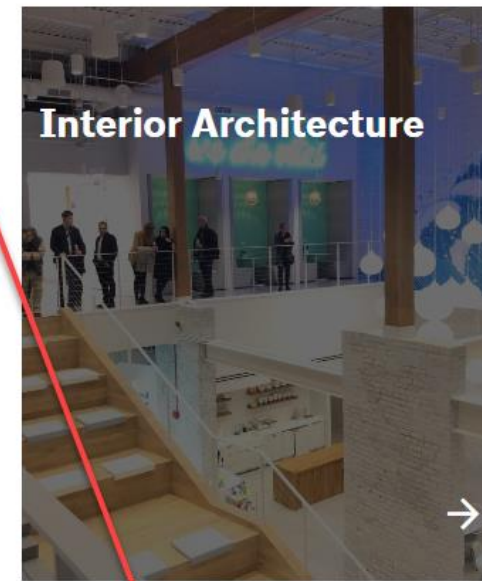
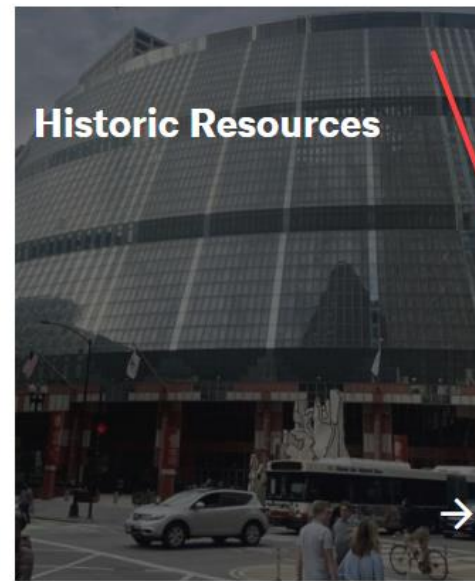
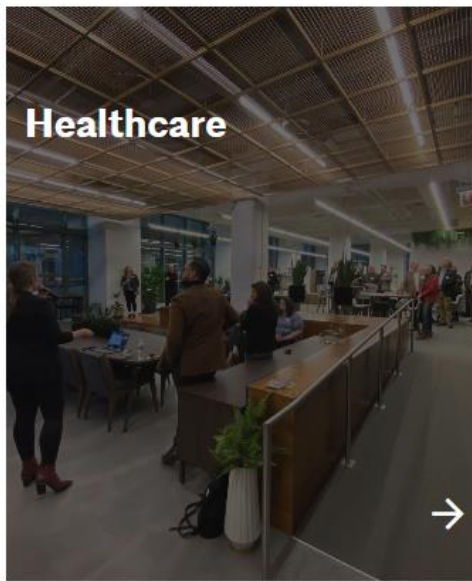


Leader Resources

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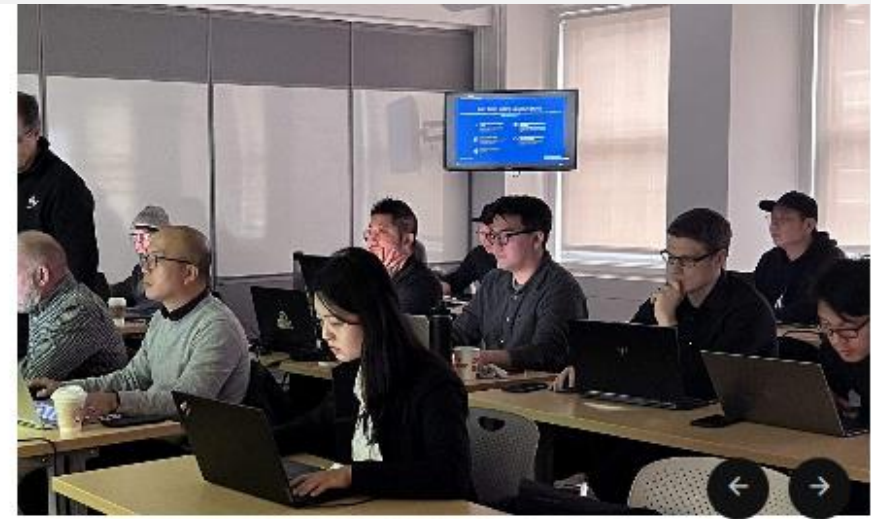
AIA Chicago TAP



AIA Chicago TAP

Technology in Architectural Practice Knowledge Community

The AIA Chicago Technology in Architectural Practice Knowledge Community (TAP) seeks to inform, educate, and connect Chicago area professionals who use technology to design, present, and document buildings. It is divided into three areas of focus: Software Solutions, Technology Management, and Advanced Technologies.

[TAP YouTube](#)[TAP LinkedIn Group](#)

Sign up to receive updates and event information from the Technology in Architectural Practice Knowledge Community.

First Name

Email

Sign Up

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TAP YouTube

TAP LinkedIn Group

Upcoming TAP Events

06.22.23

AIA Chicago TAP
Networking Event



THURSDAY / JUNE 22
6:00 PM - 8:00 PM

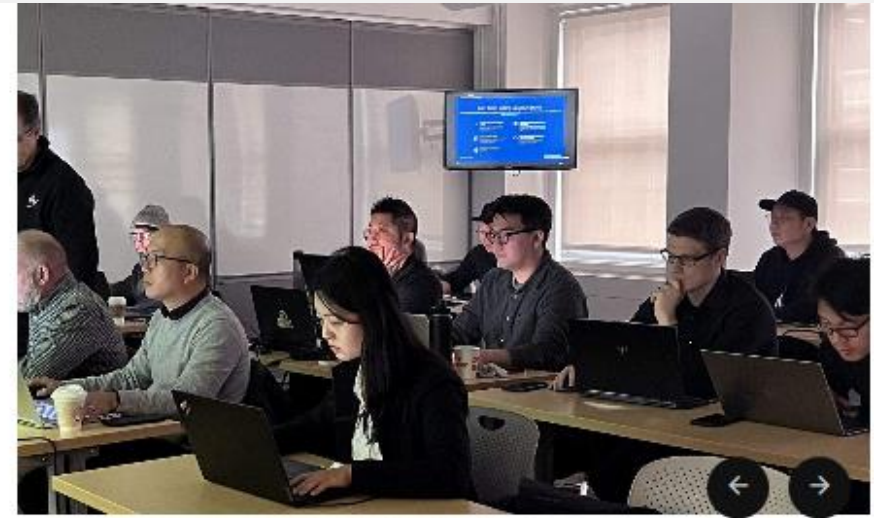
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TAP YouTube

TAP LinkedIn Group

A screenshot of the YouTube channel page for TAP (Technology in Architectural Practice) Knowledge Community. The page features a sidebar with navigation options: Home, Shorts, Subscriptions, Originals, YouTube Music, Library, History, Your videos, Watch later, Downloads, News, and Show more. The main content area displays a video titled "Is Artificial Intelligence (AI) going to take my job? (Probably not)" with a duration of 58:31. Below this, there is a section for "TAP (Technology in Architectural Practice) Knowledge Community" by AIA Chicago, showing 2 videos and 60 views. The channel description states: "The AIA Chicago Technology in Architectural Practice Knowledge Community (TAP) seeks to inform, educate, and connect Chicago area professionals who use technology to design, present, and document buildings. It is divided into three areas of focus: Software Solutions, Technology Management, and Advanced Technologies." The AIA logo is visible in the bottom right corner.

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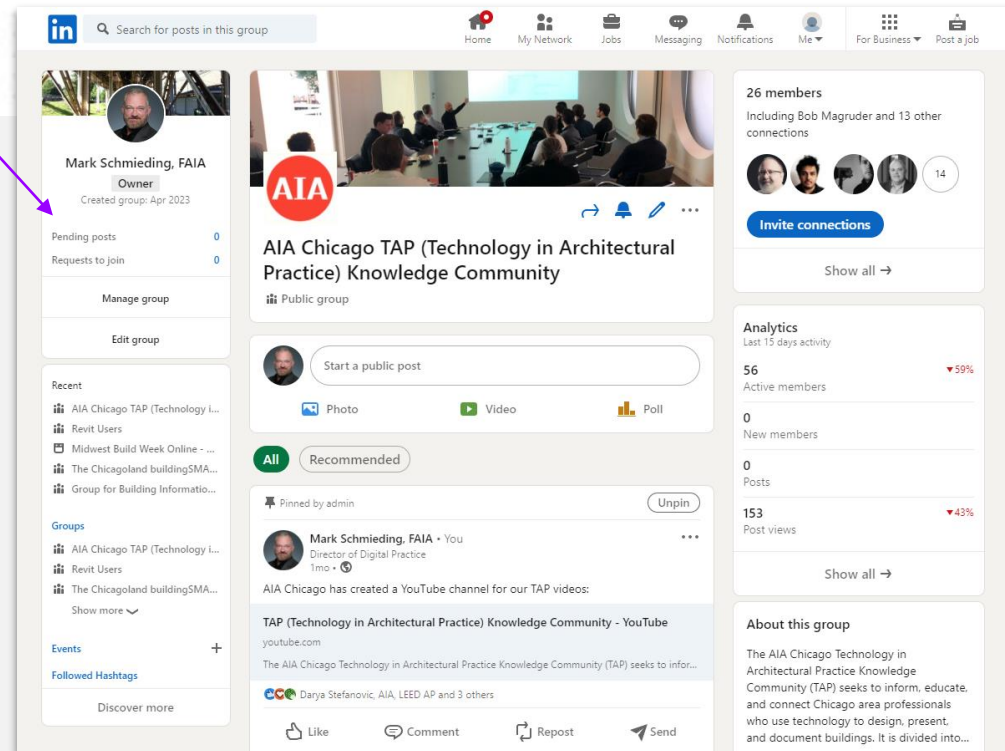
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TAP YouTube

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TAP YouTube

TAP LinkedIn Group

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AIA TAP | Boston

May, 9th 2023





| | | | |
|-------------------------|------------------------------|-----------------------------|--------------------------|
| Access Committee | Committee on the | Global Practice Network | Passive House |
| Administration and HR | Environment (COTE) | Healthcare Facilities | Massachusetts |
| Network | Cultural Facilities | Committee | Placemaking Network |
| AIA Massachusetts | Network | Historic Resources | Project Management |
| Government Affairs | Design for Aging | Committee | Roundtable |
| Committee | Committee | Housing Committee | Residential Design |
| BosNOMA | Design Visualization | IT Wizards | Committee |
| BSA/SCUP College and | Emerging Professionals | K-12 Educational Design | Revit Users Group |
| University Roundtable | Network (EPNet) | LGBTQ Network | Small Practices Network |
| Building Enclosure | Equity, Diversity, and | MakeTANK | Sustainability Education |
| Council | Inclusion (EDI) Network | Marketing/PR Network | Committee |
| Carbon Leadership Forum | Finance & Operations | MKR MGR | Urban Design Committee |
| (CLF) Boston | Network | Open Architecture | Women in Design (WiD) |
| Codes Committee | Global Design Initiative for | Collaborative Boston | Women Principals Group |
| | Refugee Children | | |



















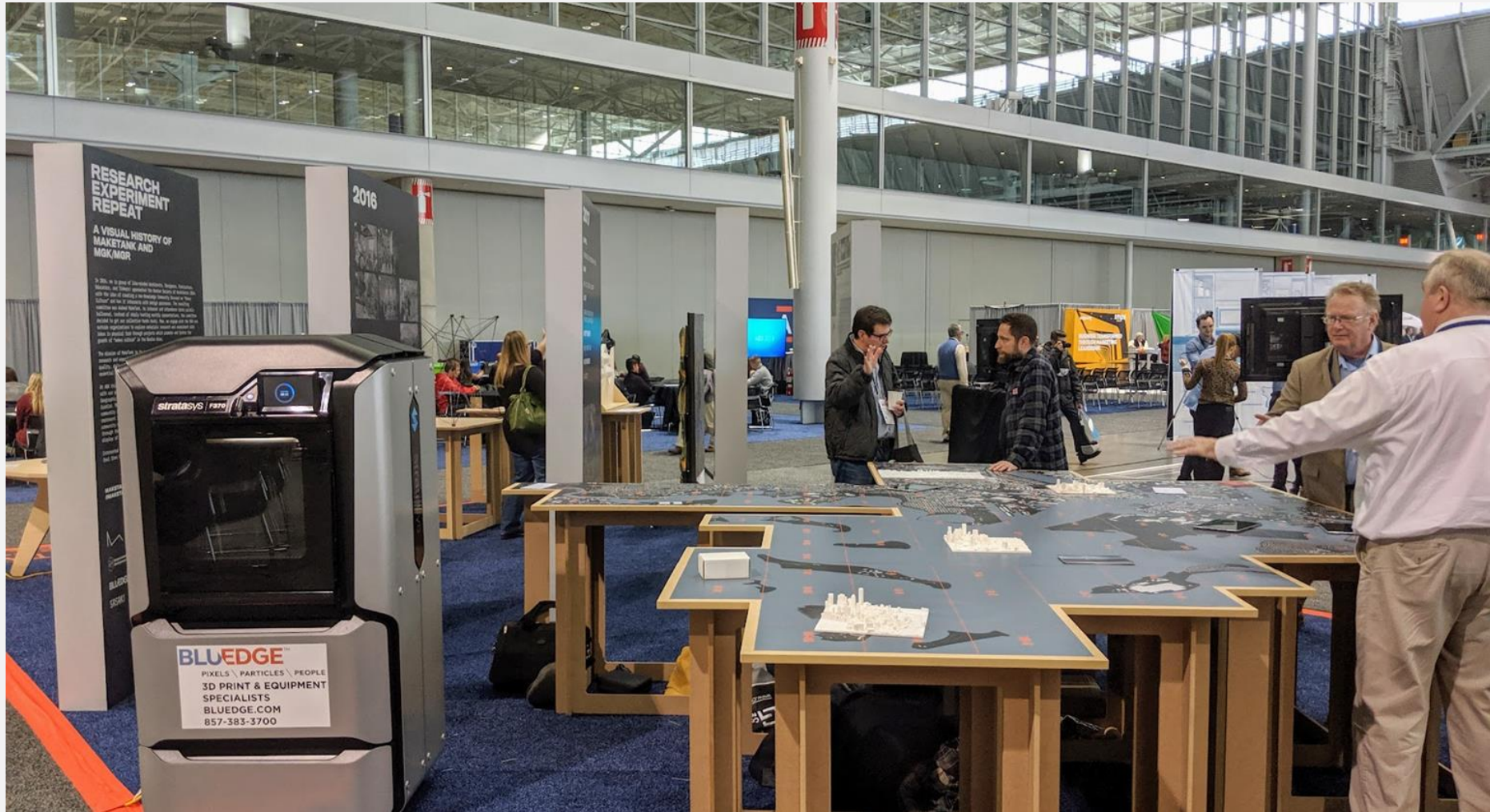
















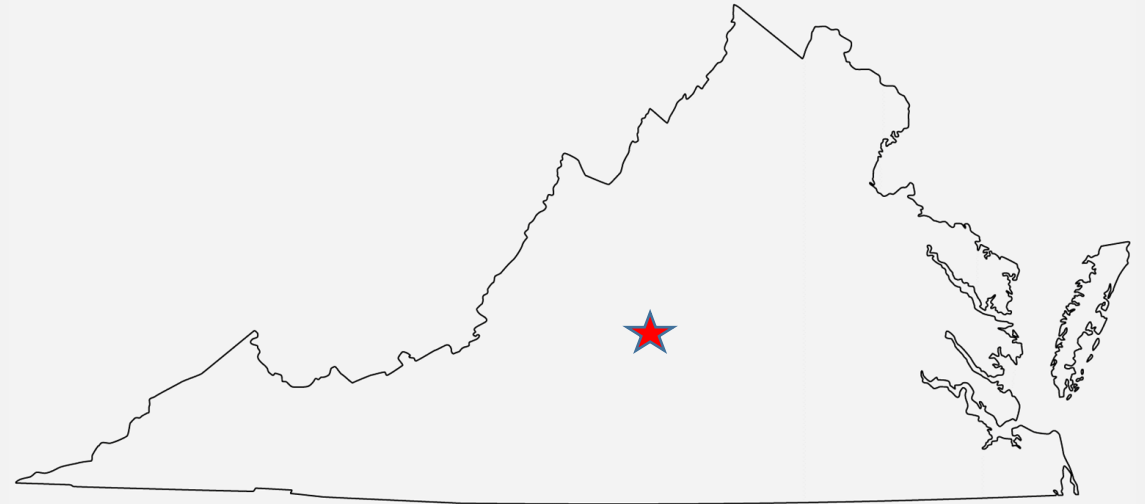
AIA TAP | Central Virginia

May, 9th 2023



Central Virginia AIA TAP Committee

The AIA CV TAP Committee provides 6 of the 18 required CEUs for the Central Virginia component each year, helping them maintain their status as a CEU provider in a partnership with the Charlottesville Revit User Group.



(despite its name, C'ville RUG covers all technology topics in the AEC industry. Typical topics: parametric components, visualization tools, content management, consultant coordination, AR/VR, scripting, energy analysis, drafting tools, etc.)

A23

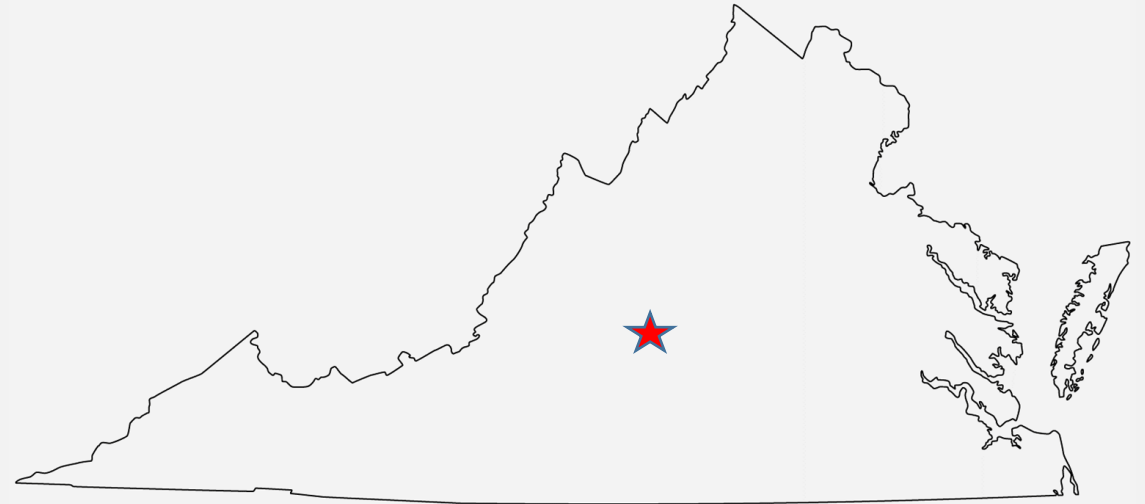
AIA Conference on Architecture 2023

July 7-10, San Francisco



Central Virginia AIA TAP Committee

AIA CV TAP is currently organizing a special event on Carbon/LCA Tools in partnership with C'ville RUG and the AIA VA COTE Committee where a mobile learning lab will provide access to test LCA software packages in a workshop environment. The goal is to develop an event program which other AIA VA components can repeat in their communities.



Tips for Success

- Form partnerships with other local groups to promote one another's events.
- Send follow-up surveys to gather feedback and be sure to implement suggestions.
- Provide content that boosts skills attendees can go back to the office and use right away.
- Provide content across a wide range of skill level – welcoming newcomers while keeping seasoned members interested.
- Create a community vibe where more experienced members share their knowledge with others.



Contact Information

To learn or share more tips for successful TAP events in your component, or if you would like to host a mobile lab Carbon/LCA Tools workshop, **contact**

William Abrahamson – wabrahamson@gparch.com

Senior Associate, Grimm + Parker Architects

Bethany Pritchard – pritchard@vmdo.com

Director of Design Technology, VMDO Architects

3 A'23 A'23 A'23 A'23 A'23

AIA TAP | AEC+Tech

Local AIA TAP Chapters

May, 9th 2023



Community-driven database

Solution



AVVIR



Software & app for creating digital twin with real-time updates

Digital Twin

Clash Detection

Project Case Study



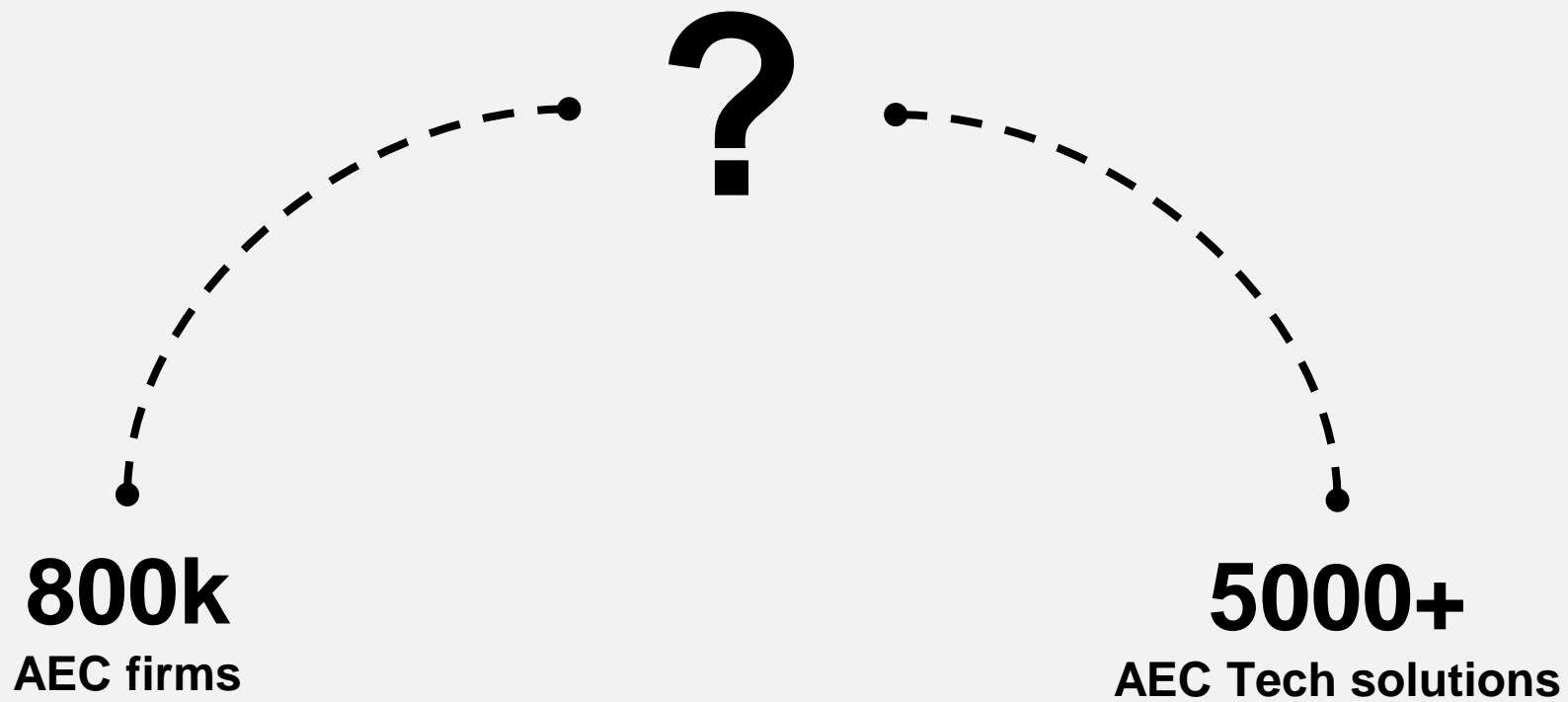
Project Type: Educational
Tools Used:  **AVVIR**
Done by:  **Skanska**
Industry: Construction
Company Size: 500+ Employees

End User



SKANSKA

Skanska is a world leading project development and construction group.



2% one or more in-house tech

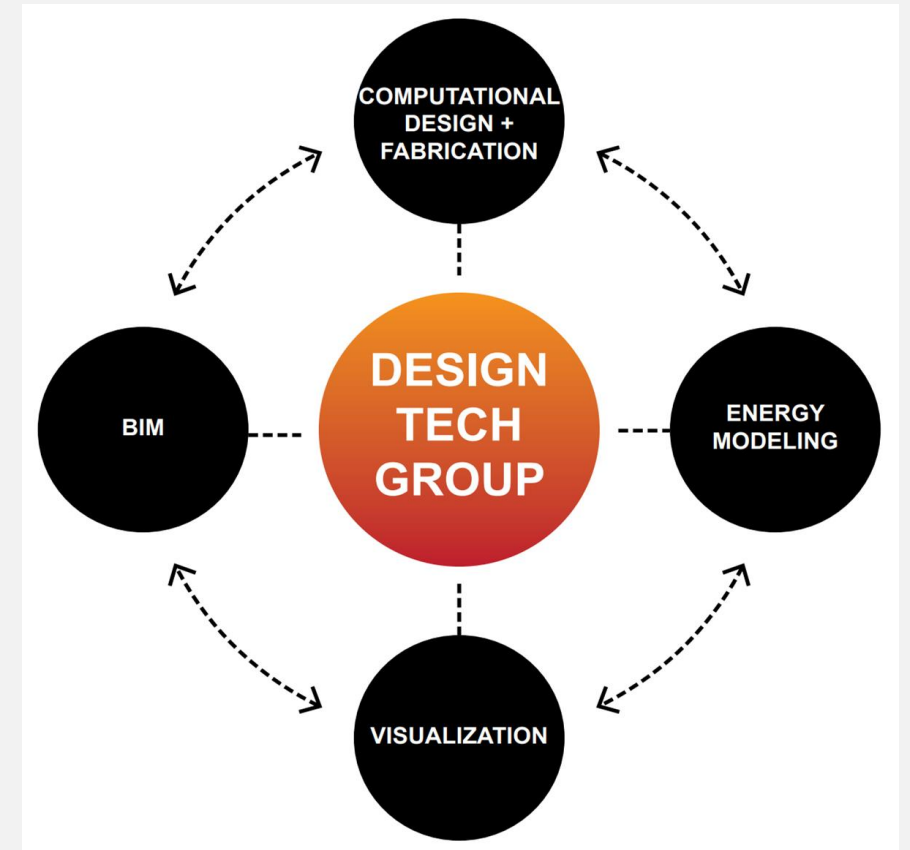
specialists

4% Go to conferences & Events

30% Use social media & Google

64% through colleagues & friends

Tech discovery process



Tool Category



AR/VR



Design
Optimization



2D
Drawing



Project
Management



Energy
Modeling



Product
Design



3D
Modeling



AI-Powered



Sustainable
Design



Real-time Collaboration



ARKIO

Arkio is a collaborative design tool to design buildings, urban plans and interiors together using VR, desktop...

[View Page](#)

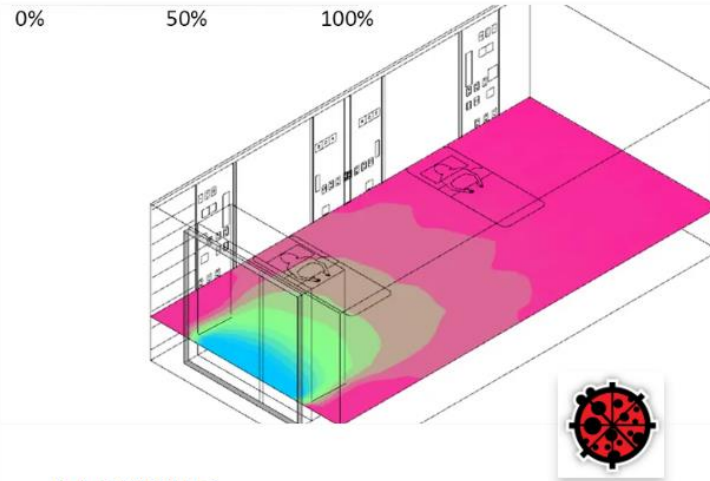
SPACEFORM

SpaceForm is an immersive platform to communicate complex projects to the most demanding clients in the...

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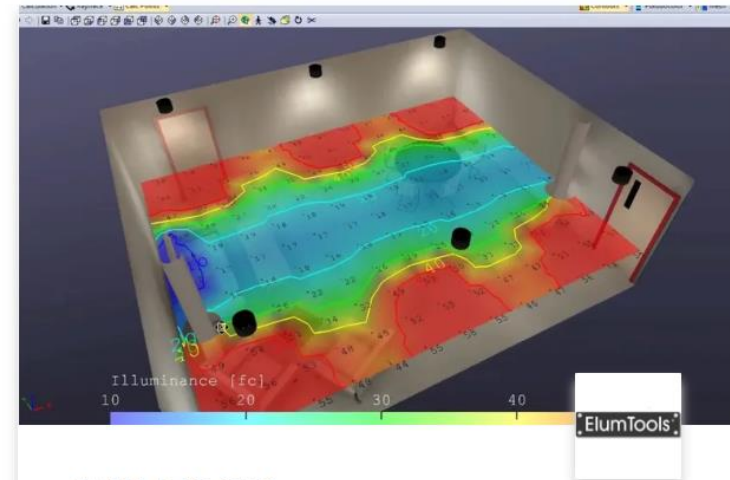
Energy Modeling



LADYBUG

Ladybug Tools is a collection of free computer applications that support environmental design and education...

[View Page](#)



ELUMTOOLS

ElumTools® is the first (and only) fully integrated lighting calculation add-in for Autodesk® Revit®. ElumTools is...

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Industry (technology end users)



ANTONIO CITTERIO
PATRICIA VIEL
BUILDINGS. INTERIORS. PUBLIC SPACES.

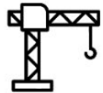
Hines

WRNSSTUDIO

ARUP



Architecture



Construction



Engineering



Product design



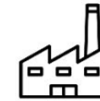
Interior design



Real estate



Landscape
design

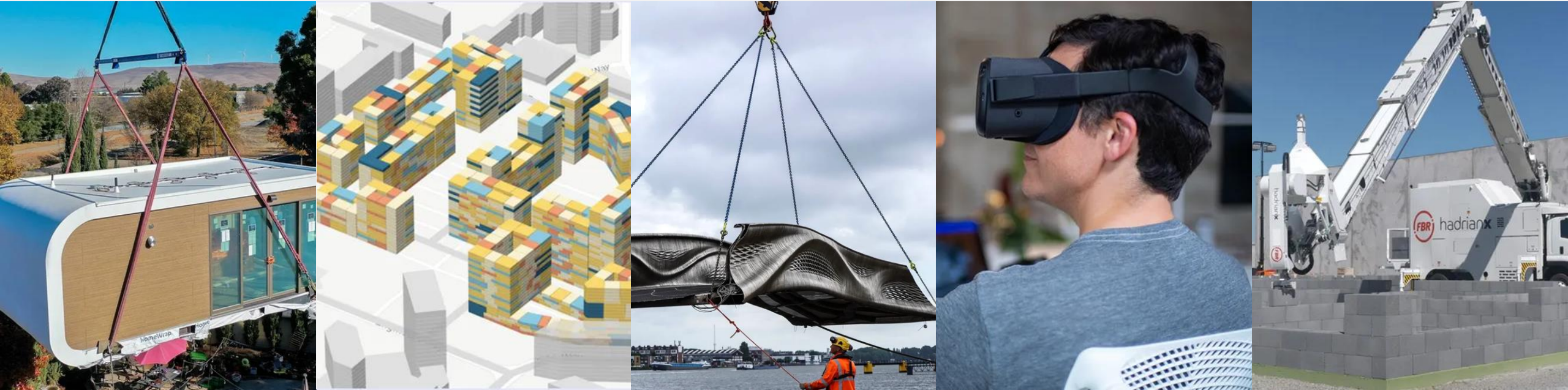


Manufacturing



Marketing &
Finance

Project type



Mixed Use



Residential



Healthcare



Sports/
Entertainment



Urban Design



Cultural/
Civic



Transportation



Commercial/
Corporate



Hospitality

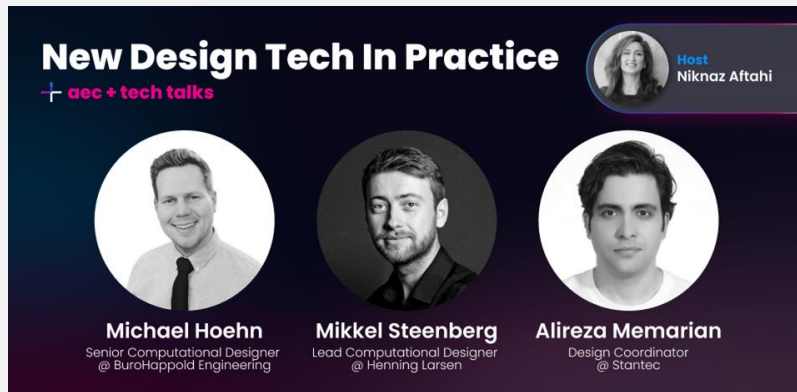
Some of the right questions to ask

- Main problems the solution solves
- Integration with your existing tech stack
- Features / Functionalities
- User-friendliness (accessible to both technical and non-technical users)
- Pricing (licensing fees, implementation, training, and ongoing support)
- Reliability and customer support
- Training duration, and available resources to help users learn and troubleshoot?
- software update frequency / upgrade process
- Security measures to protect your data

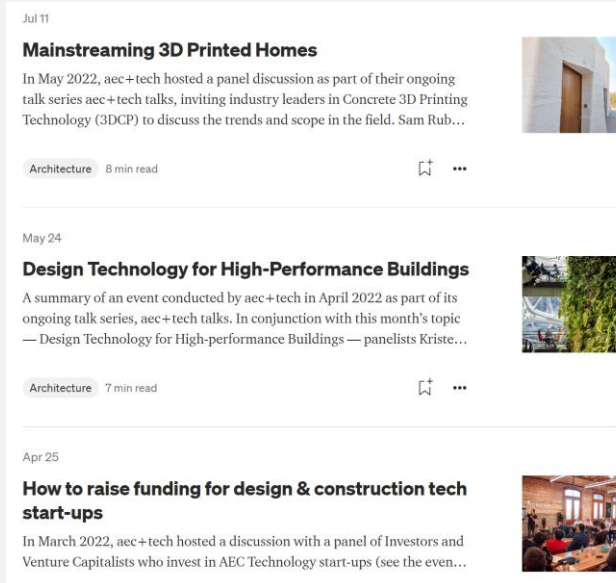
Mapping your workflow and techstack

- Software you currently use for each phase of design/construction
- Pros and Cons of each
- Extra features you need
- How do you stay ahead in discovering and implementing the best tools if there is no innovation team or activity designed into your operations
- How do you assign your annual budget for new tools/tech
- How do you measure your RIO?

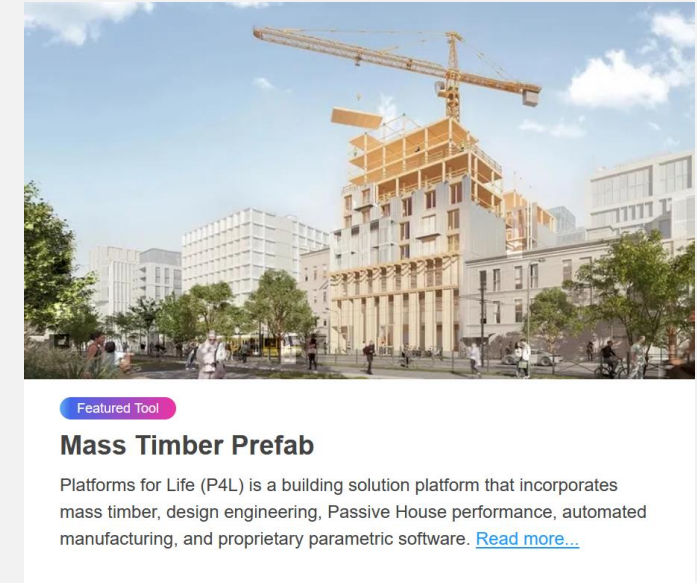
Community Aspect



aec+tech monthly talks
covering tech in practice



Reviews of latest tools
and trends



Monthly newsletter
featuring the latest tools



Q/A?

3 A'23 A'23 A'23 A'23



GET INVOLVED! AIA TAP



[illegible]