

# **Live Session : AI in AEC Papers Review**

# Agenda

- ML Basics
- AI in AEC Overview
- Paper Discussion
- General Discussion

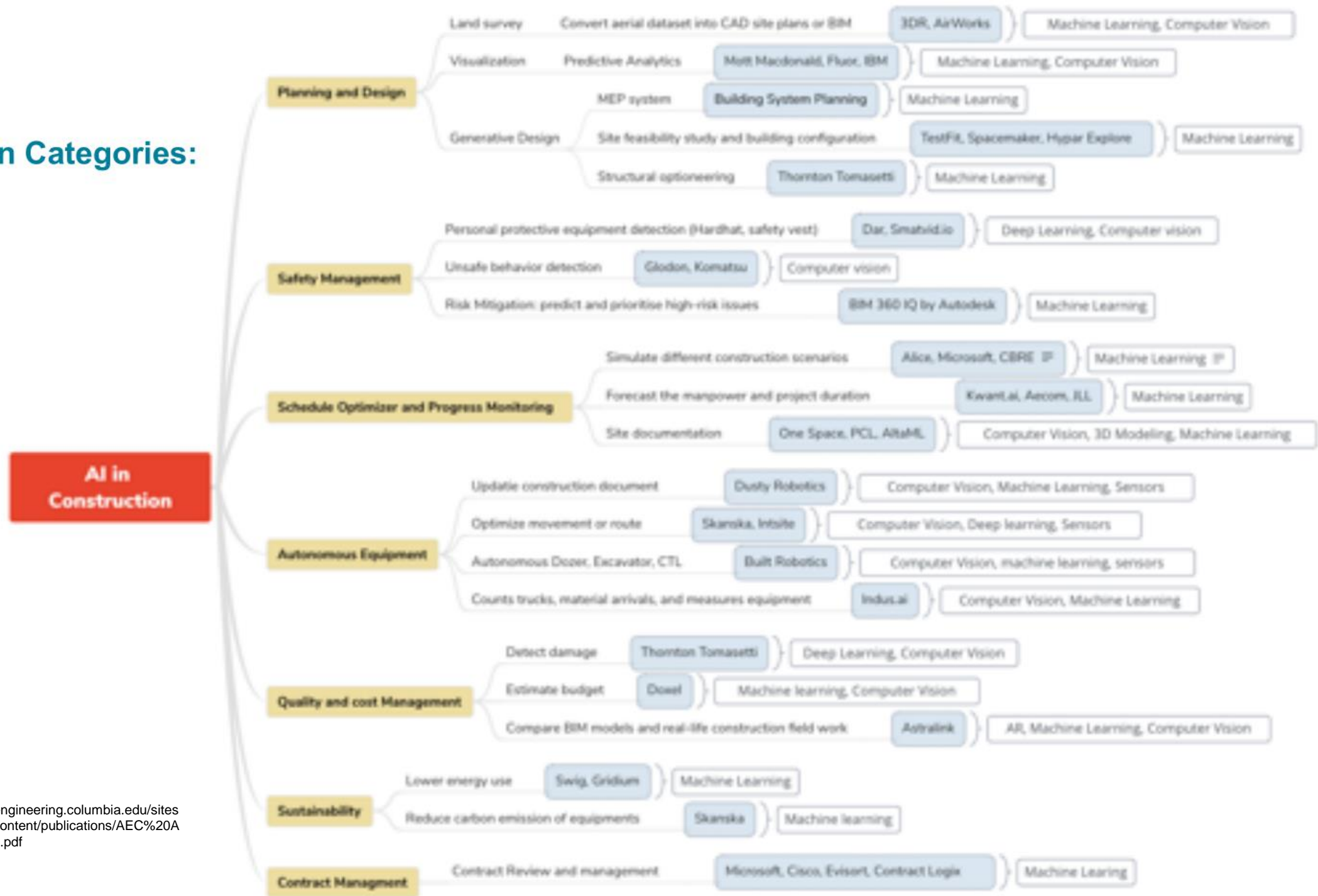
# ML Basics

- Neural Network
- CNN
- RNN
- VAE
- GAN

# AEC AI APPLICATION

- Events
  - Stanford : AI4AEC
  - DC I/O
  - ETH Zurich
  - Acadia

## Seven Categories:



Source :

<https://cbips.engineering.columbia.edu/sites/default/files/content/publications/AEC%20AI%20research.pdf>

# Papers Review

- <https://drive.google.com/drive/folders/1IzJXOfIgxNZ5UCskNkaiOJbWlsKpUdal?usp=sharing>

# AI Applications

- NVIDIA GauGAN (Sketch to Realistic images)
  - <http://nvidia-research-mingyuliu.com/gaugan>
- Draw together with Neural Network
  - [https://magenta.tensorflow.org/assets/sketch\\_rnn\\_demo/index.html](https://magenta.tensorflow.org/assets/sketch_rnn_demo/index.html)

# General Discussion

- Paper Q n A
- What are some areas of improvement in AEC?
- According to you, what are
- Is there any particular topic you want to know more about in future sessions
- **Feedback** : Tips on improving the structure / content of live sessions to be more effective
- Other questions



# Learning Resources

- <https://github.com/Mistrymm7/AlforArchitects>