Briefing Document for Georgian Triangle lecture on Artificial Intelligence: Impact on Automation in the Construction Industry

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- IAARC – the International Association for Automation and Robotics in Construction – over four decades of conference proceedings are freely available at IAARC
- Factors Influencing Adoption and Integration of Construction Robotics and Automation Technology in the US https://doi.org/10.1061/(ASCE)CO.1943-7862.0002103 2021. Alternative systems of classification of technologies and impediments are used in this article, which may spur thought. (Full access may be restricted.)
- Model to Predict the Impact of a Technology on Construction Productivity https://doi.org/10.1061/(ASCE)CO.1943-7862.0000328 2010 (Full access may be restricted.)
- "Robotic technologies for on-site building construction: A systematic review", https://doi.org/10.1016/j.jobe.2020.101584 2020. This is an overview of the technologies being used and the common applications being addressed. (Full access may be restricted.)
- Brick & Mortar Ventures portfolio of companies in construction automation and robotics
- For other interesting companies and products (with videos) in this area:
    - https://www.dronedeploy.com/
    - https://buildots.com/
    - Crack Pro Robotic Crack Sealing Vehicle
    - Komatsu Intelligent Machine Control
    - Trimble Rapid Positioning System
    - TyBot - An Autonomous Rebar-tying Robot
    - Meet SAM, the bricklaying robot
    - Agility Robotics
- From Bad to Worse: Canada's Productivity Slowdown is Everyone's Problem This article singles out the construction industry in Canada as having the worst productivity performance in the last four years and last forty years.
- The Strange and Awful Path of Productivity in the U.S. Construction Sector This is a recent analysis of construction productivity in the US, and it poses some interesting questions
- Delivering on construction productivity is no longer optional This is a McKinsey report that projects demand globally and identifies productivity as a barrier to meeting demand, unless something is done; they have some suggestions. While some of their terms, sources of data, and system boundaries for analysis are fuzzy, they present an interesting perspective in Exhibit 6.
- Donald Wright: Urban densification is not going to solve our housing crisis - The Hub For a contrarian perspective on the housing crisis in Canada, this article can be read.