Things to Note

- Synthesis Algorithms are combined with Deep Learning
    - To intelligently manage uncertainties and provide highly accurate distinct design solutions
- A novel idea of an ML intermediary was introduced, which communicates between the user and computational algorithms.
    - Intelligently captures the user’s intention while managing the input for synthesis algorithms.
    - Interprets numerous solutions returned by the solver and provides the user with a distinct distribution of concept solutions.

Things to Note

- This approach derives from the existing kinematic knowledge to create a new framework for mechanism synthesis

- Solves problems that have had no good theoretical underpinning, such as defect-free generation, conditioning of the input, and contextual concept generation.

- Deep learning was used to learn the meaningful representations of linkage parameters and used in a novel way to enhance the users' design experience.