Parametric Design uses defined parameters to generate numerous designs with the aid of algorithms. This can help with productivity as well as innovation to create multiple designs and configurations of products and architecture which would have not surfaced using traditional methods, not to mention all done in a fraction of the time needed with the power of computers. This reading list has an emphasis in architectural design and features literature from 1981 to present to help give an idea of the beginnings of parametric design to current methods.

The Library will periodically add new resources to this list. Links to the full-text are indicated. If you encounter any problem in retrieving the materials, please contact library@sutd.edu.sg for assistance.

Please also forward us titles that you would like to share with others in this list.

Sections

- INTRODUCTION
- DESIGN SYSTEMS, TOOLS, TECHNIQUES AND AUTOMATION
- STRUCTURES
- FLOOR PLAN & LAYOUT
- DESIGN PROJECTS
- SUSTAINABLE DESIGN
INTRODUCTION
Basic description and fundamentals of parametric design thinking and methods


Main Library General Lending (NA2700 DIA)

Chapter: Raising the i-Factor: Bridging Parametric Shape and Parametric Design Pages 67-88
Chapter: Spatial Computing for Design—an Artificial Intelligence Perspective Pages 109-127

Main Library General Lending (NA2728 JAB)

Main Library Reference (NA2543 ARC)

Main Library Reference (NA1 COM)


Main Library General Lending (NA2728 SAK)

DESIGN SYSTEMS, TOOLS, TECHNIQUES AND AUTOMATION
Various parametric design methods, software to generate architecture design


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Design of architecture structures utilizing algorithms


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FLOOR PLAN & LAYOUT
Using various methods requiring parametric input to generate variations of layouts


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**DESIGN PROJECTS**

Feature projects that utilize parametric design methods


**SUSTAINABLE DESIGN**

Methods used for sustainable design using algorithms and parameters


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