Kinetic

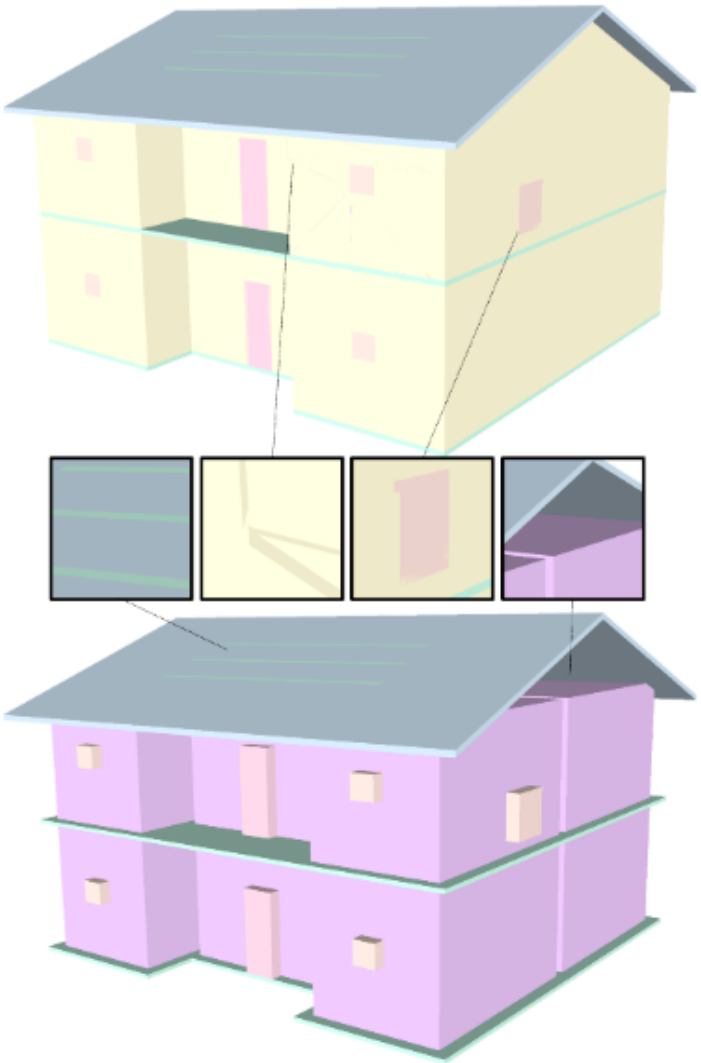
Team member:

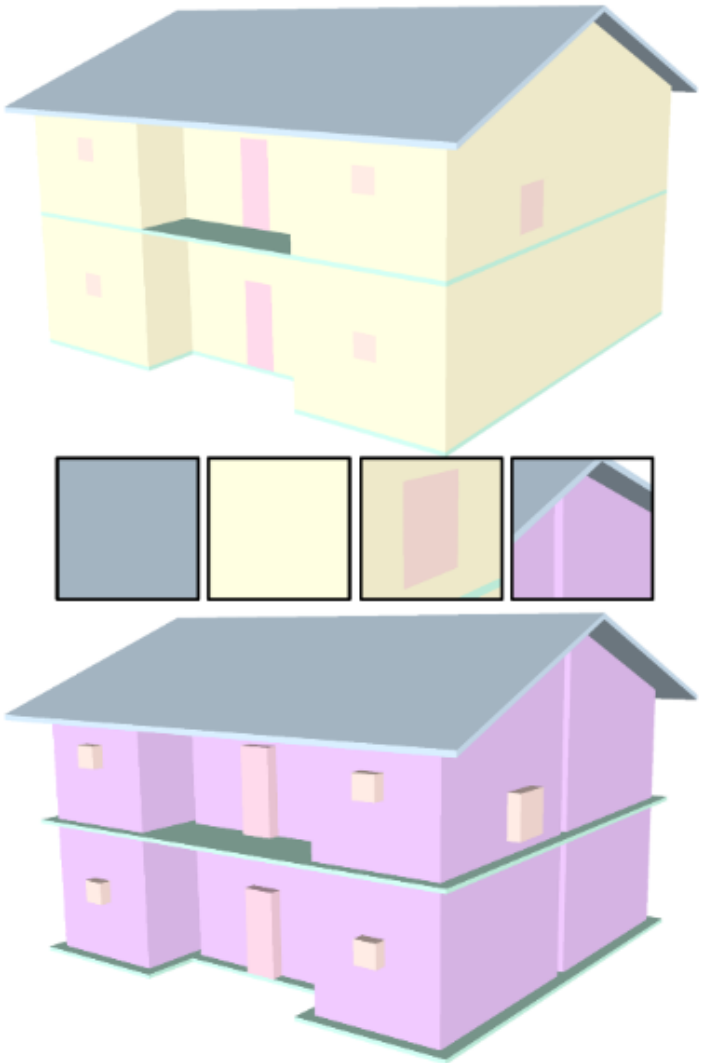
Demuth Axel
Geraldes Pereira Dorian

Supervisor :

Pierre Alliez
Vincent Chabannes

objectives





title

CGAL

Geometry Kernels

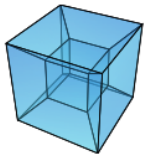
2D and 3D Linear Geometry Kernel

Hervé Brönnimann, Andreas Fabri, Geert-Jan Giezeman, Susan Hert, Michael Hoffmann, Lutz Kettner, Sylvain Pion, and Stefan Schirra

This package contains kernels each containing objects of constant size, such as point, vector, direction, line, ray, segment, circle as well as predicates and constructions for these objects. The kernels mainly differ way they handle robustness issues.

User Manual Reference Manual

dD Geometry Kernel

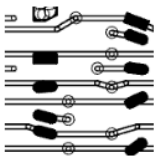


Michael Seel

The dD Kernel contains objects of constant size, such as point, vector, direction, line, ray, segment, circle in d dimensional Euclidean space, as well as predicates and constructions for these objects.

User Manual Reference Manual

2D Circular Geometry Kernel

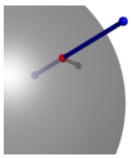


Pedro Machado Manhães de Castro, Sylvain Pion, and Monique Teillaud

This package is an extension of the linear CGAL kernel. It offers functionalities on circles, circular arcs and line segments in the plane.

User Manual Reference Manual

3D Spherical Geometry Kernel



Pedro Machado Manhães de Castro, Frédéric Cazals, Sébastien Loriot, and Monique Teillaud

This package is an extension of the linear CGAL Kernel. It offers functionalities on spheres, circles, circular arcs and line segments, in the 3D space or restricted on a reference sphere.

User Manual Reference Manual

Tools

- learn how to use CGAL package
- learn how to read structure mesh to use it in CGAL code
- learn how to use KINETIC package to fill the structure mesh