Abstract: Started as a European project in 1996, the CGAL library was initially a way for researchers to mutualize the effort of developing essential computational geometry tools. Over the years the scope has grown and the open source library now covers point set processing, polygon mesh processing, mesh generation … In this presentation I will give an overview of the design paradigms used to achieve performance, robustness and ease of integration, as well as the algorithms available. I will also introduce the dual license model and the organization and governance of the open source project.

Short bio: After a PhD in mathematics to apply computational geometry to computational structural biology, Sébastien joined GeometryFactory and the Editorial Board of the CGAL project. He is a co-author of several CGAL packages, but is mainly involved in the development of algorithms on polygonal meshes. As part of his editorial duties, he manages the participation of CGAL at the Google Summer of Code.