Industrial Examples of Graph Applications

Ákos Csilling

Abstract:
Graph-based computational methods have been used in various contexts to tackle the inherent complexity of large, relationship-oriented datasets. They promise the ability to handle the semantics of the data, as opposed to purely statistical methods. From cybersecurity risk evaluation to automated driving, and knowledge management, we present a few sample applications where graph-based methods are being applied to real-life engineering challenges in an industrial context. These very diverse applications show the power of graphs to represent and process complex information effectively.

Ákos Csilling holds a PhD in physics from ELTE. Until 2003 he was a fellow at CERN, in Geneva. Over the past 20 years, he has been working in industry, mainly embedded system development.