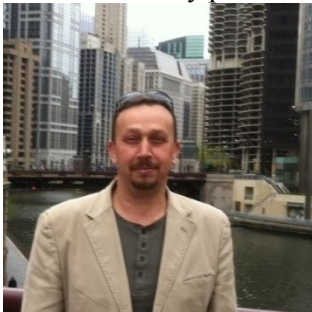


Abstract: Topology Control is a well-known technique used in wireless ad hoc and sensor networks to reduce energy consumption, discover services, predict mobility ,.... In this talk, we will show how this technique can be used to develop security policies. In particular, we will give an overview of known graph parameters oriented security including dominating sets, critical nodes, secure sets and alliance sets. Several of these parameters organize a given network by attributing different roles to vertices and/or edges under certain constraints. I show how these roles can be explored to develop efficient security policies.



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Hamamache Kheddouci was the director of the Computer Science Department of Lyon1 Technology Institute from 2005 to 2008. From 2008 to 2010, he was Deputy Director of LIESP Laboratory. He was Founder and Director of GAMA Laboratory of Lyon1 University (2010-2012). At LIRIS CNRS UMR 5205, he was the Founder and Leader of Graphs, Algorithms and Multi-Agents (GrAMA) research group (2012-2014). Since 2014, he is leading the research group Graphs, Algorithms and Applications (GOAL).

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