

## **Developments in Cartographic Generalization: Systems Perspective**

*IURD Visiting Scholars Roundtable Series*

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### **Summary**

Research and development of cartographic generalization for the past three decades provided the cartographers and GIS community with reliable and robust computer mapping solutions, but these still cannot compete with cartographers. Although much work has been done in the last decade on the development of various cartographic-automatic generalization algorithms, it appears the need to evaluate and validate existing generalization tools has been overlooked. Kazemi's Ph.D research at the University of New South Wales (UNSW) assesses the existing generalization systems to develop a detailed generalization framework for deriving multi-scale data and map products from a single high-resolution database. This talk highlights the need to maintain one master database in order to reduce data handling and data duplication, discuss the generalization themes, frameworks and operations. Later, well-known generalization tools are introduced, and then assessed as test beds based on the principles of generalization leading to development of conceptual-practical framework to generalize road networks databases. It is done to build a practical generalization framework and workflow in order deliver coherent capabilities to automate the generalization of roads for use in “derivative mapping” applications.