Publications:

3D geomarketing segmentation: A higher spatial dimension planning perspective
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

3D Indoor Building Environment Reconstruction using Polynomial Kernel, Least Square Adjustment, Interval Analysis and Homotopy Continuation
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

3D Nearest Neighbour Search Using a Clustered Hierarchical Tree Structure
Publication: Research - peer-review › Conference article – Annual report year: 2016

Automated Photogrammetric Image Matching with Sift Algorithm and Delaunay Triangulation
Publication: Research - peer-review › Conference article – Annual report year: 2016

Classified and Clustered Data Constellation: An Efficient Approach of 3D Urban Data Management
Publication: Research - peer-review › Journal article – Annual report year: 2016

Improving Nearest Neighbour Search in 3D Spatial Access Method
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Multidimensional Big Spatial Data Modeling Through A Case Study: Lte Rf Subsystem Power Consumption Modeling
Publication: Research - peer-review › Journal article – Annual report year: 2016

3D Crisp Clustering of Geo-Urban Data
Publication: Communication › Encyclopedia chapter – Annual report year: 2016

3D Partition-Based Clustering for Supply Chain Data Management
Publication: Research - peer-review › Conference article – Annual report year: 2015

An amalgamation of 3D city models in urban air quality modelling for improving visual impact analysis
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Crisp Clustering Algorithm for 3D Geospatial Vector Data Quantization
Publication: Research - peer-review › Book chapter – Annual report year: 2015

3D Hilbert Space Filling Curves in 3D City Modeling for Faster Spatial Queries
Publication: Research - peer-review › Journal article – Annual report year: 2015

An overview of the applications for early warning and mapping of the flood events in New Brunswick
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Comparative Analysis of Photogrammetric Methods for 3D Models for Museums
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Spatial access method for urban geospatial database management: An efficient approach of 3D vector data clustering technique
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014
Development and challenges of using web-based GIS for health applications
Publication: Research - peer-review › Book chapter – Annual report year: 2011

Exact computation of the Voronoi Diagram of spheres in 3D, its topology and its geometric invariants
Publication: Research - peer-review › Article in proceedings – Annual report year: 2011

Flood Progression Modelling and Impact Analysis
Publication: Research › Paper – Annual report year: 2012

RF power consumption emulation optimized with interval valued homotopies
Publication: Research - peer-review › Conference article – Annual report year: 2011

Towards introducing a Geocoding Information System for Greenland
Publication: Research - peer-review › Paper – Annual report year: 2012

Arctic Basemaps In Google Maps
Publication: Research › Conference article – Annual report year: 2010

Early Warning And On-Line Mapping For Flood Events
Publication: Research › Book chapter – Annual report year: 2010

Kinetic Line Voronoi Operations and Their Reversibility
Publication: Research - peer-review › Journal article – Annual report year: 2010

Online mapping and querying health data
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Geospatial-Enabled RuleML in a Study on Querying Respiratory Disease Information
Publication: Research - peer-review › Book chapter – Annual report year: 2009

On kinetic line Voronoi operations and finite fields
Publication: Research - peer-review › Article in proceedings – Annual report year: 2009

On the isomorphism between the medial axis and a dual of the Delaunay graph
Publication: Research - peer-review › Article in proceedings – Annual report year: 2009

The measurement of Geospatial Web Service quality in SDIs
Publication: Research - peer-review › Article in proceedings – Annual report year: 2009

Towards building a geo-service broker
Publication: Research - peer-review › Book chapter – Annual report year: 2009

Towards Web-based representation and processing of health information
Publication: Research - peer-review › Journal article – Annual report year: 2009

A methodology for automated cartographic data input, drawing and editing using kinetic Delaunay/Voronoi diagrams
Publication: Research - peer-review › Book chapter – Annual report year: 2008

A RuleML Study on Integrating Geographical and Health Information
Publication: Research - peer-review › Article in proceedings – Annual report year: 2008
Dynamic GIS
Publication: Research - peer-review › Book chapter – Annual report year: 2008

Dynamic Street Network Analysis for Evacuation Planning in Flood Events
Publication: Research - peer-review › Book chapter – Annual report year: 2008

Early warning and mapping for flood disasters
Publication: Research - peer-review › Article in proceedings – Annual report year: 2008

Geospatial services for decision support on public health
Publication: Research - peer-review › Article in proceedings – Annual report year: 2008

Online GIS services for mapping and sharing disease information
Publication: Research - peer-review › Journal article – Annual report year: 2008

On-line street network analysis for flood evacuation planning
Publication: Research - peer-review › Book chapter – Annual report year: 2008

Ontology-based querying and visualization of geo-referenced health information
Publication: Research - peer-review › Article in proceedings – Annual report year: 2008

Polygon Feature Extraction from Satellite Imagery Based on Colour Image Segmentation and Medial Axis
Publication: Research › Journal article – Annual report year: 2008

The Canadian Geospatial Data Infrastructure and health mapping
Publication: Research - peer-review › Journal article – Annual report year: 2008

Web-GIS application for flood prediction and monitoring
Publication: Research - peer-review › Book chapter – Annual report year: 2008

A study of the usability of CGDI in health mapping
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2007

Decision Support for Flood Event Prediction and Monitoring
Publication: Research - peer-review › Article in proceedings – Annual report year: 2007

Feature Extraction and Simplification from colour images based on Colour Image Segmentation and Skeletonization using the Quad-Edge data structure
Publication: Research - peer-review › Article in proceedings – Annual report year: 2007

GIS Support for Flood Rescue
Publication: Research › Conference abstract in proceedings – Annual report year: 2007

Reversibility of the Quad-Edge operations in the Voronoi data structure
Publication: Research - peer-review › Article in proceedings – Annual report year: 2007

The Voronoi diagram of circles made easy
Publication: Research - peer-review › Article in proceedings – Annual report year: 2007
Visualization of the Nucleation and Growth of Particles
Publication: Research - peer-review › Article in proceedings – Annual report year: 2000

On the conversion of ordinary Voronoi diagrams into Laguerre diagrams
Publication: Research - peer-review › Article in proceedings – Annual report year: 1999

An algorithm for the dynamic maintenance and construction of Additively Weighted Voronoi diagrams
Publication: Research - peer-review › Article in proceedings – Annual report year: 1998

An incremental algorithm for the computation of planar Johnson-Mehl tessellations
Publication: Research - peer-review › Article in proceedings – Annual report year: 1998

Dynamic additively weighted Voronoi diagrams made easy
Publication: Research - peer-review › Article in proceedings – Annual report year: 1998

Local coordinates and interpolation in a Voronoi diagram for a set of points and line segments
Publication: Research - peer-review › Article in proceedings – Annual report year: 1998

Spatio-temporal change representation and map updates in a dynamic Voronoi data structure
Publication: Research - peer-review › Article in proceedings – Annual report year: 1998

Visualizing changes in a dynamic Voronoi data structure via time travel
Publication: Research - peer-review › Article in proceedings – Annual report year: 1998

Projects:

Emulated power and radiance minimization for safer cellular phones with longer lasting batteries
Project: PhD