

# 2015 UNB ENGINEERING DESIGN SYMPOSIUM

## DEPARTMENT OF GEODESY AND GEOMATICS

April 8, 2015

Fredericton Convention Centre



TIME	SESSION	ENGINEERING DESIGN PROJECT	AUTHOR
8:20	<b>Opening Remarks</b>		
8:30	<b>Session I</b>		
		Establishing the UNB Control Network: Comparison GNSS with terrestrial techniques	Matthew Cameron
		Investigating UNB's GAPS's processing ability using data sets influence by common environmental challenges and conditions	Stefan David Dubay
		The Practicality of Trigonometric Heighting: Comparing Trigonometric Heighting, Geometric Levelling, and GNSS Heighting	Gregory Nicholas Rodger
		Assessing accuracy of low-cost low altitude UAV Photogrammetry	Chan Byung Choi
		Aerial mapping techniques and technologies: A cost benefit analysis	Colin Graham McLean
		Predicting urban growth in Fredericton using the SLEUTH Model	Charles-Olivier Cyr
10:00	<b>Break</b>		
10:15	<b>Session II</b>		
		Using PPP-GPS to estimate tidal motions in the Arctic and comparison to a tidal model	Cally Ann Keddy
		GNSS derived orthometric heights for water level monitoring and geoid analysis	Matthew Blair Williams
		Marine Cadastre: Lessons from US Gulf of Mexico for Canada	Eric John Root
		Evaluating Alberta's systemic handling of private minerals rights	Richard Eric Larsen
		New Brunswick Condominiums: Recommendations for improving governance by implementing educational requirements	Joseph Alan Doiron
		Optimizing the Campus Floor Plan: An interactive mapping application for E-Level of Head Hall, University of New Brunswick	Adam Paine
12:15	<b>Lunch</b>		
13:15	<b>Session III</b>		
		Mapping UNB walking paths to compare elevation data sources	Mark Andrew Mayne
		Reporting Motor Vehicle Accidents with a GNSS based Application	Craig David Murray
		Modelling urban traffic using the Neo4j graph database	Jacob A. Burton Wood
		A spatial analysis of the City of Fredericton's bus stop locations	John Alexander Mason
		Discovering mobility behaviour using real trajectory data with M-Atlas	Mitchell Kyle Lyn Allen
		Mapping the extent and intensity of a natural disaster using social media	Nathan Edward Hughes
14:45	<b>Break</b>		
15:00	<b>Session IV: Canadian Institute of Geomatics Competition</b>		
		UNB Campus Control Network: Designing a deformation monitoring campaign	Adam Michel Thimot
		DIM: Developing a mobile least squares adjustment application for Android	Michael Terence Bremner
		Improving collision investigation and reconstruction capabilities with Trimble TX5 Laser Scanner	Alice Jane Cunningham
		The use of hyperspectral images and laser scan data for the improvement of mine models in Canada's oil sands	Lukas Alexander Fraser
		Analysis of GSM data in conjunction with Twitter data for understanding social behaviour in Senegal	Tianyu Liu
		The effect of ambulatory islands on international water boundaries	James Arthur Batty
17:00	<b>Awards and Closing Remarks</b>		

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