



Dalhousie Libraries

## IN THIS ISSUE

## GIS & DATA SERVICES

Meet the Dalhousie Libraries' new GIS & Data Services team. From the GIS Centre comes James Boxall (Geographer & Map Curator) and Jen Strang (GIS Analyst). From Data Services comes Julie Marcoux (Data Librarian) and Sai Choi Chua (Statistical Computing and Data Support). The GIS & Data Services team is located in the Killam Library along with Gwen MacNairn, the Coordinator for GIS & Data Services.

By supporting student's research activities as students work on analyzing microdata from Canadian and international surveys and by extracting data from CANSIM tables available on Statistics Canada's website, exploring census data available through the DLI (found within an interface restricted to the Dalhousie community) and finding and using datasets compiled by other researchers, the GIS & Data Services team is able to provide comprehensive information to those seeking their assistance.

In this issue of *Layers*, read more about the work Jen Strang is doing to support Dr. Aporta's Arctic research; Julie Marcoux and Sai Choi Chua's work assisting students in their data research for the economics honours poster competition; and James Boxall's work facillitating the historical digital map of Halifax.

Visit the Dal Libraries <u>GIS Centre</u> or <u>Data Services</u> page to see how your teaching, course assignments and research projects can be enhanced.



The new GIS & Data Services team, located in Killam Memorial Library. Back: James Boxall and Jen Strang. Front: Julie Marcoux and Sai Choi Chua. (Photo by Marlo MacKay)

## FIGHTING ALTERNATIVE FACTS

WARNING: NUMBERS SHOWN MAY BE LARGER THAN THEY APPEAR. It may seem as though data should be straight forward and easy to decipher, but the way it is released can sometimes create seemingly "alternative facts." Some questions are harder to answer than they might appear, and data literacy skills may be required to help interpret the numbers found.

Including real-world data within your course content, such as data found through Statistics Canada, could help bring more clarity to course materials. Statistics Canada conducts many surveys each year and does census collection every five years. Using open access to Statistics Canada's rich data resources — which include survey microdata, CANSIM, aggregate survey and census statistical tables, plus census maps at various geographical levels — will lead to more data literacy and better informed data consumers.

"Knowing that zero means less than five, not zero, would help me better read and interpret data in the future," says SIM student, Scarlett Kelly after she attended a data workshop discussing the 2016 Census. Data quality notes attached to StatsCan data tables can help you avoid mistakenly sharing "alternative facts."



May 2017

### SUPPORTING RESEARCH



Catrographic map highlighting Pan-Arctic sled trails and boat routes.

Jen Strang, of the Dal Libraries GIS Centre, has been assisting the research of Dr. Claudio Aporta for the past two years. Her support has primarily been in the creation of several high-quality cartographic maps that coincide with Dr. Claudio Aporta's research.

Aporta has been documenting Inuit traditional knowledge for 17 years, in particular the well-established sled

trails and boat routes. Every year he adds trails from one or two new communities and integrates the data into a pan-Arctic map.

The creation of these maps means that this data can now be shared with other Inuit communities across Canada. thanks to Canadian Senator. Charlie Watt. Watt has a personal connection to these communities, being Canada's only Inuit Senator.

### **ENRICHING COURSE WORK**

On April 7, Dalhousie University's Department of Economics held their honours poster presentations. Topics included: investigating links between social capital and crime rates; exploring suicide rates of Indian farmers in relation to debt and rainfall; and mapping out

the influence of proximity to universities on housing prices. Students were able to find the right data sources for their research with help from Julie Marcoux and Sai Choi Chua at the GIS & Data Services Centre.

### RETIREMENT OF CHARLIE WALLS



Charlie Walls has been at Dalhousie for 38 years and will be retiring at the His students – end of August.

We want to thank him for all he has done to further the use and understanding of GIS technology within

the earth sciences curriculum.

which include some of the current GIS & Data Services team members – have appreciated his approach to teaching and willingness to help them learn.

# RELIVE HISTORY IN 3D WITH THE HALIFAX DIGITAL MAP



Locations of some buildings and wharfs in 1914 Halifax, over top of current roads and structures. This map can be turned into a 3D map and other years can be added.

The Halifax Digital Map, conceptualized and facilitated by James Boxall, Geographer & Map Curator at the GIS Centre, will be on display during the fall term.

The Halifax Digital Map allows you to search places and add your own stories and images. The display will change over time as users add content. The first iteration of the map

begins just before the explosion in the Halifax Harbour and continues to present day.

The Halifax Digital Map will be featured at the Dalhousie Art Gallery as part of an exhibit marking the 100th anniversary of the Halifax Explosion.

### ESRI CANADA SCHOLARSHIP & AWARD WINNERS

Dalhousie students continue to use ArcGIS to support their coursework and research interests.

Eligible students submitted a poster and a summary report of a current project to the Esri Canada GIS Scholarship and Award competition. This year the quantity and quality of submissions were impressive.

The winner of the GIS Scholarship was Caitlin Cunningham and the GIS Award went to Christopher Andrews.

Caitlin, a Masters student in the School for Resource and Environmental Studies, explored the topic of enhancing ecosystem services mapping through primary data. Christopher, currently a Master of Science student in the Faculty of Agriculture, conducted and presented work regarding bumble bees and blueberry fields in Prince Edward Island.



Gwen MacNairn, Coordinator of the GIS & Data Services, presents Master of Science student Christopher Andrews with the Esri Canada GIS Award. (Photo by Becky Tucker)



Caitlin Cunningham accepts her GIS Scholarship from Dr. Claudio Aporta, Director of the Esri Canada Centre of Excellence (ECCE). (Photo by Gwen MacNairn)

**May 2017** 

### SUPPORTING ACADEMIC TECHNOLOGIES

### From LITS to ATS

The Libraries Information Technology Services unit (LITS) recently expanded their services to support audio visual equipment in the classrooms and video conferencing technologies on campus. To accomplish this, the department also increased their staff complement to twenty, with six experienced Dalhousie staff members from other departments joining the unit.

To reflect this addition of services, LITS has been renamed Academic Technology Services (ATS). Still headquartered on the third floor of the Killam Library, ATS will continue collaborative relationships with CLT, ITS, MedIT and Facilities. ATS will also continue to provide training and support for Bright-space and IT Help Desk assistance.



Front row (I-r): Director of ATS Marc Comeau, Dalhousie President Richard Florizone, David George, University Librarian Donna Bourne-Tyson, Graham Denman. Back row (I-r): Spencer Cantley, ATS Manager of Services, Support & Training Mick Bottom, Roger Brush, Jeff Langille, Richard Payne. (Provided photo)

## VERSIONS OF ACADEMIC SOFTWARE

The newest release of ArcGIS is version 10.5 and will be available in all learning commons and computer labs for the upcoming 2017/2018 academic year.

Also available for both Windows and Mac is SPSS 24. For Windows only, SPSS AMOS 24 and SAS 9.4M4 is also available.

To download SPSS and AMOS, use your NetID. For SAS, contact Sai Choi Chua; and for ArcGIS, contact Jen Strang.

Software downloads can be found at: https://software.library.dal.ca/

### LEARNING GIS TECHNOLOGY

Course using GIS offered during the summer term:

GIS in ecology:
BIOL/ENVS/GEOG/MARI 3633

New graduate course to be offered in the fall term:

GIS for resources and society: ENVI 5050

## **UPCOMING EVENTS**

Research Assistants or Teaching Assistants may be interested in this Research Bootcamp session:

**May 24** 

Research Data Management Planning

1–2:30 p.m.
Halifax, CHEB 264
Saint John, DMNB 105
Truro, Cobequid Room



Contact lindsay.mcniff@dal.ca to register.

## Find past issues of Layers here

Contributors: Gwen MacNairn, Julie Marcoux, James Boxall, Jen Strang & Sai Choi Chua

Layout & design: Becky Tucker

Editors: Gwen MacNairn & Marlo MacKay