Calgary Regional Consortium

Great Teachers
Make Great Students

Callysto: Bringing Data Analytics and Computational Thinking into Everyday Curriculum

PRESENTED BY

Byron Chu, David Chan & Michael Lamoureux

SERIES SESSIONS

Date	Time
October 02, 2018	9:00 AM - 3:30 PM

LOCATION

St. Leo Centre - 6220 Lakeview Drive SW

FEE

$0.00

QUESTIONS?

Contact Us:
crc-register@arpdc.ab.ca
403-291-0967

REGISTER ONLINE

Visit our website to register:
crcpd.ab.ca

Program

AUDIENCE: Grades 5-12 TEACHERS, TECHNOLOGY LEADS, AND SCHOOL ADMINSTRATORS ARE ENCOURAGED TO ATTEND.

The ability to process information in an analytical way will be in high demand as students enter the digitally skilled future. Because of this, teachers are now feeling the pressure to incorporate more coding and data analytics into their curricula. Imagine being able to use a university-level analytics platform – capable of big data processing, data visualizations, math equations, and text formatting – in your grades 5-12 class. And imagine this tool being cost-free, easy to use, and only needing a web browser to operate!

This is a real opportunity for simple, accessible, and interactive learning – we call it Callysto (www.callysto.ca).

In this full-day introductory workshop, teachers will be introduced to the federally-funded Callysto platform, and will have a hands-on chance to explore the modules that have been developed for existing course curricula (covering, among other subjects, history, science, and literature). We will show you how to incorporate and administer these modules into your classroom, and will work with you to customize modules to fit your specific needs.

Learning Outcomes:

- Understand how Callysto resources can complement traditional learning approaches while incorporating computational thinking
- Experience interacting with the Callysto platform and modules
- Take part in exercises to administer the platform and modify Callysto modules

About the Organizers:

Cybera (www.cybera.ca) is a not-for-profit technology-neutral organization responsible for driving Alberta's economic growth through the use of digital technology. Its core role is to oversee the development and operations of Alberta's cyberinfrastructure – the advanced system of networks and computers that keeps government, educational institutions, not-for-profits, business incubators and entrepreneurs at the forefront of technological change. The Pacific Institute for the Mathematical Sciences (PIMS www.pims.math.ca) is a collaborative network dedicated to the promotion of discovery, understanding and awareness in the mathematical sciences.

NOTE: Participants' sub costs will be reimbursed. Further details will be provided to participants at the session.

Space is limited. Register early to avoid disappointment.

Presenters

Byron Chu

Byron Chu has PhD in Biochemistry and today he applies the same scientific principles to data and cloud-enabled projects. Since 2018, he has helped lead the Callysto project in training teachers across Canada on bringing open data and data literacy into their classrooms.

David Chan

David Chan is a Data Scientist at Cybera. David facilitates the management and operations of Cybera's Rapid Access Cloud, a national award-winning service that provides free cloud computing resources to Alberta-based educators, researchers, non-profits and small to medium sized organizations. He has been studying data science since 2012, and helped lead the development of the company's data science team. This group is using a scientific approach to analyze data stemming from a variety of sources to extract descriptive, predictive and prescriptive insights. David is a PhD graduate from the University of Calgary, where he used high performance computing to investigate protein dynamics and interactions in atomistic detail.

Michael Lamoureux

Michael Lamoureux is a Professor of Mathematics at the University of Calgary who serves as the Innovation Coordinator of PIMS. Lamoureux has previously served as Chair of the Department of Mathematics and Statistics at the University of Calgary. Lamoureux has an active research program at the interface of harmonic analysis, wave propagation, and numerical methods with applications to problems in geoscience. Courses in complex variables and industrial mathematics leveraging Jupyter have been developed and delivered by Lamoureux and he is also the lead author of an e-book on Jupyter and the platform's usage in teaching and research.

Registration Notes

Attendees should bring their laptops to do the hands-on activities and exercises.

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Providing Quality Professional Learning Opportunities to K-12 Education Staff