DATA CHAMPION TRAINING CATALOGUE

DATA ACTION LAB

Fall '19 – Winter '20

The **Data Action Lab** (DAL) is a joint venture of 3 Ottawa-area companies with a combined experience of:

- 50+ university courses taught;
- 40+ corporate workshops given;
- 60+ data analysis and A.I. projects completed, during
- 35+ years working with data.

Through its training courses, DAL seeks to:

- provide a shared space for **data consumers**, **producers**, **practitioners**, **scientists** and **champions**;
- provide paths for **education** and **enrichment** for all of these groups;
- keep pace with **developments** in the digital arena and keep participants moving along with these, and
- provide **just-in-time learning opportunities** for participants, focusing on their challenges and skillsets.

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Data Training Framework

In October 2012, *Harvard Business Review* published an article predicting that **data scientists** would be the "rock stars of the 21st century" and comparing them with the ubiquitous Wall Street "quants" of the '80s and '90s in terms of impact. The same article declared data scientists to be a "hybrid of data hacker, analyst, communicator, and trusted adviser" – a far cry from the days when data analysts played second fiddle to financial experts and marketing gurus!

Data Champions sponsor and manage data projects and initiatives, and advocate on behalf of the analytics team and the client. The Data Action Lab, through the use of **micro-training sessions** (MCTs) of 3 hours each (minimum group size: 5, maximum group size: 15), provides an overview of the Government of Canada data strategy and how to implement in a work environment. DAL delivers a series of practical courses on the use of artificial intelligence, data science, and machine learning in the workplace.

The applications of these concepts are illustrated with the help of examples (ranging from the simple to the elaborate), along with discussions of common challenges and pitfalls.

The Data Champion training catalogue consists of 18 MCTs, covering various topics that range from data visualization and dashboard design to practical data management and empowering a data-focused workplace.

Data Training Framework

No mathematical or computer programming knowledge is required, neither is experience working with data. All necessary concepts will be introduced in the Focused Training Sessions (FTS) and labs (LAB), as required.

In order to obtain the **Data Champion Certificate** (12+ MCTs), participants are required to demonstrate practical application of the concepts discussed in the MCTs *via* a collaborative Show-and-Tell (SNT) session.

Participants select MCTs from the catalogue and register online at data-action-lab.com.

Price per MCT (HST not included)	**Regular Rate** 11- MCTs	**Program Rate** 12+ MCTs
Early-Bird Rate (reg. prior to 31-Aug)	$450/MCT	$350/MCT
Post-Deadline Rate (reg. after 31-Aug)	$490/MCT	$390/MCT

Participants who register to 12+ MCTs at a time are eligible for the **program** rate (and the Data Champion Certificate). Participants who register to 11 or fewer MCTs at a time must pay the **regular** rate; any purchase occurring before 31-Aug is further eligible for the **early-bird** rate.

Scheduled courses are held in the Ottawa downtown core; catalogue courses can also be offered in-house and are available across Canada. Course content and schedule are subject to change.

Send inquiries to info@data-action-lab.com. [Certaines sessions sont disponibles en français, selon la demande].

Micro-Training Sessions

Data Champion: 18 micro-training sessions (13 FTS + 4 LAB + 1 SNT; 3 hours each)

Code	Type	Description	(Suggested) Prerequisites	Learning Interest
DC-1*	FTS	Developing a Data Strategy Roadmap	N.A.	Data Governance
DC-2*	FTS	Developing a Data Governance Strategy	DC-1	Data Governance
DC-3*	LAB	Data Strategy and Governance Checklist Review	DC-1, DC-2	Data Governance
DC-4*	FTS	Empowering a Data Focused Workplace	N.A.	People and Culture
DC-5*	FTS	Initiating and Managing AI/ML Projects I	DC-4	Environment and Digital Infrastructure
DC-6	FTS	Initiating and Managing AI/ML Projects II	DC-5	Environment and Digital Infrastructure
DC-7	LAB	AI/ML Projects: Case Study Workshop	DC-6	Environment and Digital Infrastructure
DC-8*	FTS	Data Roles: Who to Hire in the Information Workplace	DC-4 to 6	People and Culture
DC-9	FTS	Data Toolbox Overview I (R, Python, SAS, Power BI, MS Stack, Tableau, etc.)	N.A.	Environment and Digital Infrastructure
DC-10	LAB	Data Toolbox Overview II	DC-9	Environment and Digital Infrastructure
DC-11	FTS	A Manager's Guide to Data Engineering	DC-4	Environment and Digital Infrastructure
DC-12	FTS	Black Books: Identifying and Managing Rogue Data Sources	DC-11	Environment and Digital Infrastructure
DC-13	FTS	Data Mapping: Identifying and Managing Organizational Data Sources	DC-11	Environment and Digital Infrastructure
DC-14	FTS	Visualizing Performance: Best Practices in Management Dashboard Design	N.A.	Communication
DC-15	LAB	Management Dashboard Design Workshop	DC-14	Communication
DC-16	FTS	Identifying Key Performance Indicators	DC-15	Data as an Asset
DC-17	FTS	Preparing to Publish Open Data	N.A.	Data as an Asset
DC-18*	SNT	Collaborative Show-and-Tell	Certificate only	Communication

*Mandatory MCT for the obtention of the **Data Champion Certificate**

Data Champion Training Calendar – Fall '19

Code	Dates (select 1 of)	Code	Dates (select 1 of)
DC-1*	TBD	DC-10	TBD
DC-2*	TBD	DC-11	TBD
DC-3*	TBD	DC-12	TBD
DC-4*	TBD	DC-13	TBD
DC-5*	TBD	DC-14	TBD
DC-6	TBD	DC-15	TBD
DC-7	TBD	DC-16	TBD
DC-8*	TBD	DC-17	TBD
DC-9	TBD	DC-18*	TBD

*Mandatory MCT for the obtention of the **Data Champion Certificate**

Data Champion Training Calendar – Winter '20

Code	Dates (select 1 of)	Code	Dates (select 1 of)
DC-1*	TBD	DC-10	TBD
DC-2*	TBD	DC-11	TBD
DC-3*	TBD	DC-12	TBD
DC-4*	TBD	DC-13	TBD
DC-5*	TBD	DC-14	TBD
DC-6	TBD	DC-15	TBD
DC-7	TBD	DC-16	TBD
DC-8*	TBD	DC-17	TBD
DC-9	TBD	DC-18*	TBD

*Mandatory MCT for the obtention of the **Data Champion Certificate**

Founders / Lead Instructors

Jennifer Schellinck is passionate about bringing cutting-edge data technology to organizations wanting to develop the best analysis and decisions. She applies the latest machine-learning and systems-modelling techniques to help organizations achieve their greater potential.

Jennifer's machine learning and simulation expertise comes from her background in Cognitive Science, earning a Ph.D. in 2009. As an Adjunct Professor at Carleton University, she remains active in academia and keeps up-to-date on current research. She has been offering data-based workshops since 2015.

She founded **Sysabee** in 2012 and is the founding member of the **Data Science Experts Group**, an association of specialists who customize data-driven solutions for each client.

Patrick Boily is interested in the application of mathematics/statistics to evidence-based decision support. He has worked on 25+ such projects since 2008, first as a public servant, then as a quantitative consultant for Carleton University, and later through his company **Idlewyld Analytics and Consulting Services**.

Patrick is fully bilingual and has taught over 40 university courses in mathematics, statistics, data analysis, machine learning, and quantitative consulting. He has been leading workshops and training courses on data analysis/machine learning since 2015.

He has extensive experience in data science, machine learning, A.I. and predictive analytics, data cleaning, data visualization, queueing systems, stochastic modelling, and simulations – managing and being involved in numerous projects in these subject areas from inception to completion.

Stephen Davies is the CEO of **DAVHILL Group**, a business intelligence and data analytics company based in Ottawa, Ontario, specializing in the implementation of Business Intelligence, Artificial Intelligence, and Machine Learning Systems. At DAVHILL, Stephen's main focus is to make data real and useable for everybody.

Steven has more than 25 years of experience working in both public and private sectors. With an academic background in Physics and Engineering, he has worked in semiconductor and OEM manufacturing as an engineer and supply chain director.

Early in his career in operations management, he started to do data analysis and never quite escaped. As a Business Intelligence and Process Transformation consultant he is delighted to provide training courses to the Data Action Lab.

Sysabee DAVHILL Group IDLEWYLD

DAL instructors have consulted for (and taught to participants from) a variety of groups, a selection of which is shown below:

- Canada Revenue Agency
- Canada School of Public Service's Digital Academy
- Canadian Air Transport Security Authority
- Canadian Coast Guard
- Canadian Food Inspection Agency
- Canadian Institute for Health Information
- The Children's Hospital of Eastern Ontario
- Communications Research Centre Canada
- Department of National Defence
- Environment and Climate Change Canada
- Fisheries and Ocean Canada
- Health Canada
- Immigration, Refugees and Citizenship Canada
- Indigenous and Northern Affairs Canada
- Natural Resources Canada
- Nuclear Waste Management Organization
- Office of the Privacy Commissioner of Canada
- Privy Council Office
- Public Services and Procurement Canada
- Royal Canadian Mounted Police
- Transport Canada
- Treasury Board Secretariat

Consult our **Advanced Data Training Catalogue** for a list of technical data analysis courses.

Visit **data-action-lab.com** or contact **info@data-action-lab.com** for more information.