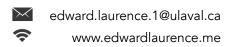
EDWARD LAURENCE

Member of Dynamica Research Group, Université Laval



EDUCATION

2016 - [2019] Ph.D. in Physics, Université Laval

Resilience of neural networks

Supervisors: Pr Louis J. Dubé, and Pr Patrick

Desrosiers

2014 - 2016 M.Sc. in Physics, Université Laval

Supervisors: Pr Louis J. Dubé, Pr Patrick

Desrosiers, and Pr Daniel Côté

2011 - 2014 B.Sc. in Physics, Université Laval

TECHNOLOGY SKILLS

Programming

Swift, C/C++, Python, R, Javascript, Objective-C, Ruby, GNU/Linux, LaTeX, SASS

Frameworks

D3js , Node.js, CocoaPods, Alamofire, SwiftyJSON, FacebookPop, FBSDLoginKit, CodeData, GoogleMaps, Bootstrap, Django, I18n, and many scientific librairies (PyTorch, Numpy, Matplotlib, Scipy, ...)

Developing tools & Cloud services

Github, Xcode, Sublime Text, Openshift, iTunes Connect, Heroku, Amazon AWS, Chrome Store, Inkscape, Sketch, Zeplin

WORK EXPERIENCE

2017 Self-employed | Analysis

Analysis and visualization of the collaborations

Sentinel North, Université Laval

2014 - 2017 Teaching assistant, Université Laval

Correction & Answering questions

Non-linear dynamics, chaos and complexity

Numerical physics Statistical physics

PROFILE

Passionate about data analysis, including deep learning, data visualization, and iOS development. Enthusiast about open software projects. Would like to have an impact in my community.

ENTREPRENEURSHIP

Cofounder of Serum

Web plugin to detect fake news.

Developed in 48 hours. Bayesian inference of fake news.

Available on Chrome store. www.factserum.co 2017

VOLUNTEERING AND INVOLVEMENT

Violinist in palliative care Hôpital Saint François d'Assise 2015 - 2016

Garmin Watch Face

More than 5000 downloads

Tutor in science

Cégep Garneau 2009 - 2014

LANGUAGES

French > Native English > Advanced Spanish > Basic

AWARDS

2017 - [2019] Graduate research award

Fond de recherche Nature et technologies (FRQNT)

20 000\$/year

2017 Sentinel North fellowship

Sentinel North, Université Laval

18 000\$/year

2017 Byron-T. Darling scholarship

Département de physique, de génie physique et d'optique, Université Laval

5 000\$

2015 - 2016 Graduate research award

Fond de recherche Nature et technologies (FRQNT)

15 000\$

2012 Undergraduate research award

Natural Sciences and Engineering Research Council of Canada (NSERC)

4 500\$

SELECTED SCIENTIFIC CONTRIBUTIONS

Papers or preprints

2018 Exact analytical solution of irreversible binary dynamics on networks

E. Laurence, J.-G. Young, S. Melnik, and L. J. Dubé

Phys. Rev. E, 97, 032302

2018 Network archaeology: phase transition in the recoverability of network history

J.-G. Young, L. Hébert-Dufresne, E. Laurence, C. Murphy, G. St-Onge, and P. Desrosiers

arXiv: 1803.09191

Selected presentations

The speaker is in bold

2017 12th International School and Conference on Network Science, Indianapolis (USA)

Functional resilience in dynamical complex networks with adaptive connectivity

E. Laurence, P. Desrosiers, N. Doyon, and L. J. Dubé

Persistent activity of neural dynamics on hierarchical networks

E. Laurence, P. Desrosiers, and L. J. Dubé

2014 Complex networks are an emerging property of hierarchical preferential attachment (poster)



L. Hébert-Dufresne, E. Laurence, A. Allard, and J.-G. Young

9th International School and Conference on Network Science, Berkeley (USA)

Outstanding Poster Award