

# Damien Rioux-Lavoie

## Curriculum Vitae

3282 Avenue de la Pépinière

H1N 1G2, Montréal, QC

☎ (514) 586-2374

✉ [riouxld@dms.umontreal.ca](mailto:riouxld@dms.umontreal.ca)

🌐 [www.dms.umontreal.ca/~riouxld/](http://www.dms.umontreal.ca/~riouxld/)

🌐 [damien-rioux-lavoie](https://www.linkedin.com/in/damien-rioux-lavoie)

🌐 [damien-rioux-lavoie](https://www.github.com/damien-rioux-lavoie)

### Education

- 2014–2017 **Master of science (M.Sc.) Applied Mathematics, University of Montreal.**  
Méthode SPH implicite d'ordre 2 appliquée à des fluides incompressibles munis d'une frontière libre.
- 2011–2014 **Bachelor of science (B.Sc.) Pure and Applied Mathematics, University of Montreal.**

### Professional experiences

- 2013–2017 **Research assistant, University of Montreal.**  
Supervised by Robert G. Owens.
- 2014–2016 **Coadministrator of the laboratories, Department of mathematics and statistics, University of Montreal.**
- Provide technical support to users of the computer network ;
  - Maintain and update the web page of the department of mathematics and statistics ;
  - Test new programs and interfaces ;
  - Present seminars ;
  - Perform the computer tasks assigned by the administrator.
- 2015 **Research assistant, CIRRELT, Montréal.**
- 2016–2017 **Teaching Assistant, University of Montreal.**
- MAT1410 : Calcul 2 - Autumn 2016 and Winter 2016 ;
  - MAT1958 : Mathématiques pour chimistes - Winter 2016 ;
  - MAT1681 : Mathématiques assistées par ordinateur - Winter 2017.

### Selected talk

- 2017 **10th Annual Ottawa Mathematics Conference (OCM), University of Ottawa, Ottawa.**  
A penalty method applied to the fractional heat equation

### Volunteer work

- 2017 Mentor for *Ladies Learning Code*, Montreal

### Award

- 2009 Certificate of Distinction at the Canadian Open Mathematics Challenge.

### Technical skills

**Programming languages :** C, C++, C#, JavaScript, Python  
**APIs and other languages :** WebGL, OpenGL, GLSL, HTML, CSS, LaTeX  
**Tools and softwares :** Matlab, Mathematica, Maple, R, Git  
**Development environments :** Visual Studio, Shadertoy, Unreal Engine

### Languages

**French, English :** read, spoken, written

### Areas of interest

**Research :** Applied mathematics, ODE/PDE, numerical analysis, dynamical system, rendering and computational fluid dynamics.

### Reference

Available on demand