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# Dr. Christian Blouin

Correspondence language: English
Sex: Male
Date of Birth: 7/09
Canadian Residency Status: Canadian Citizen
Country of Citizenship: Canada

## Contact Information

The primary information is denoted by (*)

### Address


Courier

Faculty of Computer Science
Dalhousie University
6050 University Ave
Halifax Nova Scotia B3H 5W1
Canada

Primary Affiliation (*)

Faculty of Computer Science
Dalhousie University
6050 University Ave
Halifax Nova Scotia B3H 5W1
Canada


### Telephone


| | |
|---|---|
| Fax | 1-902-4941517 |
| Home | 1-902-4357680 |
| Work (*) | 1-902-4946702 |


### Email


| | |
|---|---|
| Work (*) | cblouin@dal.ca |


### Website

| | |
|---|---|
| Personal | http://www.cs.dal.ca/~cblouin/Blouin |





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# Dr. Christian Blouin

## Language Skills

| Language | Read | Write | Speak | Understand |
|---|---|---|---|---|
| English | Yes | Yes | Yes | Yes |
| French | Yes | Yes | Yes | Yes |

## User Profile

Disciplines Trained In: Biochemistry

Research Disciplines: Computer Science, Biochemistry

Areas of Research: Evolution and Phylogenesis

Fields of Application: Foundations and Knowledge Acquisition

Research Specialization Keywords: Algorithms, biochemistry, bioinformatics, genomics, High performance comput., Machine Learning, molecular modeling, phylogenetics, protein, structure

## Degrees

1997/5 - 2001/5

Doctorate, Doctorate of Philosophy, Biochemistry, Dalhousie University
Degree Status: Completed
Transferred to PhD without completing Masters?: Yes

Supervisors: Dr. Carmichael J.A. Wallace

1994/9 - 1997/5

Bachelor's, Bachelor of Science, Biochemistry, Université Laval
Degree Status: Completed

Supervisors: Dr. Lindsay D. Eltis

## Recognitions

2015/3

Dalhousie Computer Science Society "Srini" award for excellence in teaching (2014). (Canadian dollar)
Dalhousie University
Prize / Award

2013/12

Dalhousie Computer Science Society "Srini" award for excellence in teaching (Canadian dollar)
Dalhousie University
Prize / Award

2012/4 Dean's Teaching Excellence Award (Canadian dollar)
Dalhousie University
Prize / Award

## Employment

2012/9 Faculty Associate
Centre for Learning and Teaching, Dalhousie University

2003/7 Professor
Computer Science, Dalhousie University

2001/5 Postdoctoral Fellow or Associate
Biochemistry and Molecular Biology, Dalhousie University

2016/7 - 2021/7 Associate Dean (Academic)
Dalhousie University

2015/7 - 2017/7 Senior Advisor, Curriculum Planning.
Provost's office, Dalhousie University

2015/7 - 2016/7 Associate Dean, Academic (interim)
Faculty of Computer Science, Dalhousie University

2001/4 - 2001/7 Consultant
MedMira

1994/4 - 1994/9 Summer Research Student
Centre de recherche du CHU de Québec

## Affiliations

The primary affiliation is denoted by (*)

(*) 2003/7 Associate Professor, Dalhousie University

## Research Funding History

**Awarded [n=4]**

2016/5 - 2021/4
Principal Applicant

Application of graph modularity inference to represent protein structures.

**Funding Sources:**

2016/4 - 2021/4 Natural Sciences and Engineering Research Council of Canada (NSERC)
DIscovery GRant
Total Funding - 115,000 (Canadian dollar)
Funding Competitive?: Yes

2015/9 - 2017/8
Co-applicant

Scotia Support Training Grant in Enzymology and Molecular Simulations.

Principal Applicant : Stephen Bearne

**Funding Sources:**

2015/9 - 2017/8 Nova Scotia Health Research Foundation (NSHRF)
Scotia Support Grant
Total Funding - 50,000 (Canadian dollar)
Funding Competitive?: Yes

2010/4 - 2016/4 Exploring the Landscape of Phylogenies

Principal Applicant

**Funding Sources:**

2010/4 - 2016/4 Natural Sciences and Engineering Research Council of Canada (NSERC)
Discovery Grant
Total Funding - 125,000 (Canadian dollar)
Funding Competitive?: Yes

2010/9 - 2015/9
Co-applicant

TULA foundation award through the Center for Genomics and Evolutionary Bioinformatics (2nd allowance)

Co-applicant : Edward Susko;

Co-investigator : Alastair Simpson; Claudio Slamowitz; Ford Doolittle; Joseph Bielawski; Michael Gray; Robert Beiko;

Principal Applicant : Andrew Roger

**Funding Sources:**

2010/1 - 2015/1 Tula Foundation
CGEB support
Total Funding - 150,000 (Canadian dollar)
Funding Competitive?: No

**Completed [n=1]**

2006/9 - 2014/5
Principal Applicant

A Research Laboratory in Evolutionary Algorithms, Computational Biology and Computer Graphics.

Co-investigator : Dirk Arnold; Stephen Books

**Funding Sources:**

2010/1 - 2015/1 Canada Foundation for Innovation (CFI)
Infrastructure Operating Funds
Total Funding - 60,000 (Canadian dollar)
Funding Competitive?: Yes

## Student/Postdoctoral Supervision

**Bachelor's [n=1]**

Principal Supervisor

Khan Nguyen (In Progress) , Dalhousie University (NSERC USRA)
Student Degree Start Date: 2011/9

**Bachelor's Honours [n=3]**

Principal Supervisor

James Ryan (In Progress) , Dalhousie University
Student Degree Start Date: 2011/9
Student Degree Expected Date: 2015/12
Present Position: MSc Candidate

Co-Supervisor

Tyler Brunet (Completed) , Dalhousie University
Student Degree Start Date: 2010/9
Student Degree Received Date: 2014/5
Present Position: PhD Candidate

| | |
|---|---|
| Principal Supervisor | Wilson Chan (Completed) , Dalhousie University<br>Student Degree Start Date: 2008/9<br>Student Degree Received Date: 2012/12 |

**Master's Equivalent [n=1]**

| | |
|---|---|
| Co-Supervisor | Sergio Ivan Castro (In Progress) , Universitad del Valles, Colombia.<br>Student Degree Start Date: 2015/6<br>Student Degree Expected Date: 2015/12<br>Present Position: Teacher (Colombia) |

**Master's Thesis [n=5]**

| | |
|---|---|
| Principal Supervisor | Jacklyn Purdue (In Progress) , Dalhousie University<br>Student Degree Start Date: 2018/1<br>Student Degree Expected Date: 2019/8<br>Present Position: Candidate |
| Principal Supervisor | Alexander Campbell (In Progress) , Dalhousie University<br>Student Degree Start Date: 2016/1<br>Student Degree Expected Date: 2019/5<br>Present Position: Candidate |
| Co-Supervisor | Tyler Brunet (Completed) , Dalhousie University<br>Student Degree Start Date: 2014/9<br>Present Position: Ph.D Candidate |
| Principal Supervisor | Alexander Safatli (Completed) , Dalhousie University<br>Student Degree Start Date: 2014/1<br>Present Position: Software Engineer |
| Co-Supervisor | Amin Syed Khalafvand (In Progress) , Dalhousie University<br>Student Degree Start Date: 2013/1<br>Present Position: Software Engineer |

**Doctorate [n=3]**

| | |
|---|---|
| Principal Supervisor | Simiao Lu (In Progress) , Dalhousie University<br>Student Degree Start Date: 2014/1<br>Present Position: Candidate |
| Academic Advisor | Jose Sergio Hleap (In Progress) , Dalhousie University<br>Student Degree Start Date: 2010/5<br>Student Degree Expected Date: 2015/10 |
| Co-Supervisor | Haibin Liu (Completed) , Dalhousie University<br>Student Degree Start Date: 2006/9<br>Student Degree Received Date: 2010/11 |

**Research Associate [n=1]**

| | |
|---|---|
| Principal Supervisor | Alexander Safatli (Completed) , Dalhousie University<br>Student Degree Start Date: 2013/5<br>Student Degree Received Date: 2008/9 |

# Publications

## Journal Articles

1. Hleap, JS, Blouin, C. (2018). The response to selection in Glycoside Hydrolase Family 13 structures: A comparative quantitative genetics approach. PLOS one. 13(4): 1-17.
Last Author
Published
Refereed?: Yes
Number of Contributors: 2

   Funding Sources: Natural Sciences and Engineering Research Council of Canada (NSERC) - RGPIN/05414-2016

2. Castro SI*, Hleap JS*, Cárdenas H, Blouin C. (2015). Molecular organization of the 5S rDNA gene. RNA Biology. 13: 391-9.
Last Author
In Press
Refereed?: Yes

3. Hleap JS*, Blouin C. (2015). The Semantics of the Modular Architecture of Protein Structures.Current Protein & Peptide Science. 17: 62-71.
Last Author
In Press
Refereed?: Yes

4. Safatli A*, Blouin C. (2015). Pylogeny: an open-source Python framework for phylogenetic tree reconstruction and search space heuristics. PeerJ Computer Science. e9: na.
Last Author
Published
Refereed?: Yes

5. Kureshi N* , Abidi SS , Blouin C. (2014). A Predictive Model for Personalized Therapeutic Interventions in Non-small Cell Lung Cancer.IEEE journal of biomedical and health informatics. 20: 424-31.
Co-Author
Published
Refereed?: Yes

6. Hleap JS* , Blouin C. (2014). Inferring meaningful communities from topology-constrained correlation networks.PloS one. 9(11): e113438.
Last Author
Published
Refereed?: Yes

7. Liu, H.*, Kešelj, V., Blouin, C. (2014). EXPLORING A SUBGRAPH MATCHING APPROACH FOR EXTRACTING BIOLOGICAL EVENTS FROM LITERATURE. Computational Intelligence. 30(3): 600-635.
Co-Author
Published
Refereed?: Yes
Number of Contributors: 3

## Conference Publications

1. Safatli A*, Blouin C. (2015). Application of Ant Colony Optimization for Mapping the Combinatorial Phylogenetic SearchSpace. 6th international conference on bioinformatics models, methods and algorithms
   Poster
   Last Author
   Published, Invited?: No