

MATTÉO DELABRE

Computer Science Ph. D. Student

 matteo.delab.re



LANGUAGES

French (native speaker)
English (proficient, C1 CEFR level)
Esperanto (beginner)



EDUCATION

*Sep 2020–
Aug 2024*

Ph. D. Candidate, Computer Science
University of Montreal, Canada

*Sep 2018–
Jul 2020*

Master's Degree, Theoretical Computer Science
University of Montpellier, France

GPA 17.38/20, ranked 1st/7.
Exchange with Université Laval (August–December 2019).

*Sep 2015–
Jul 2018*

Bachelor's Degree, Computer Science
University of Montpellier, France

GPA 17.98/20, ranked 1st/88.



HONOURS AND AWARDS

*May 2023–
present*

Ph. D. Fellowship from FRQNT
(*Fonds de Recherche du Québec — Nature et Technologies*)
Value of \$58 334 for two years (file n°335893).

*Apr 2022–
May 2023*

Google Ph. D. Fellowship
Value of \$48 520 for two years, interrupted in 2023 in favour of
the FRQNT fellowship above.

*Nov 2020–
Apr 2023*

DIRO 2021 Merit Scholarship
Value of \$17 161 for three years.

Jul 2021

ISMB 2021 Best Talk Award
(*Honourable Mention*)



TEACHING

*Jan 2022–
present*

Teaching Assistant

University of Montreal, Canada

Winter '23: Algorithm Design and Analysis

Autumn '22: Theoretical Computer Science

Winter '22 and '23: Discrete Structures for Computer Science



ADMINISTRATIVE

*Sep 2022–
present*

Organizer of Computer Science Competitions

University of Montreal Computer Science Students' Union

Founded the Calculum competitive algorithmics and programming club. Organized the first ever participation of the University of Montreal at ICPC. Trained and supervised a delegation for the Computer Science Games (CS Games).

*Sep 2022–
present*

Organizer of MiDIRO Research Seminars

University of Montreal Computer Science Students' Union

Mensual seminars geared towards undergraduate students where faculty members or graduate students present their research work.



RESEARCH PROJECTS

*Sep 2020–
present*

Ph. D. Thesis · Supervised by Nadia El-Mabrouk

University of Montreal, Canada

Reconstructing the evolutionary history of gene synteny: algorithmic methods for segmental reconciliation.

*Feb 2020–
Jun 2020*

Internship · Supervised by C. Perez and H. Bouziane

Laboratoire de l'informatique du parallélisme (LIP),
Inria — ENS Lyon, France

Study of the influence of concurrency on the reactivity of automatic reconfiguration systems for distributed applications. Design and implementation of a Python-based simulator.

*May 2018–
Aug 2018*

Internship · Supervised by Nadia El-Mabrouk

University of Montreal, Canada

Evaluation of an exact algorithm for the reconciliation of joint evolutionary histories. Implemented using C++ and Python, parallelized with OpenMP.



PUBLICATIONS

Y. Anselmetti, M. Delabre, and N. El-Mabrouk. “Reconciliation with Segmental Duplication, Transfer, Loss and Gain.” In: *RECOMB-CG 2022*. Ed. by L. Jin and D. Durand. Springer, May 2022, pp. 124–145.

M. Delabre, N. El-Mabrouk, K. T. Huber, M. Lafond, V. Moulton, E. Noutahi, and M. S. Castellanos. “Evolution through segmental duplications and losses: A Super-Reconciliation approach.” In: *Algorithms for Molecular Biology* 15.12 (May 2020).

M. Delabre, N. El-Mabrouk, K. T. Huber, M. Lafond, V. Moulton, E. Noutahi, and M. S. Castellanos. “Reconstructing the History of Syntenies Through Super-Reconciliation.” In: *RECOMB-CG 2018*. Ed. by M. Blanchette and A. Ouangraoua. Springer, Sept. 2018, pp. 179–195.