Martin Weyssow, PhD student *Curriculum Vitae, January 2022*

Contact Information

Affiliation:

GEODES, Software Engineering Research Lab
Département d'Informatique et de Recherche Opérationnelle (DIRO)
Université de Montréal

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Research Interests

Machine learning for software engineering, multi-modal representation learning, natural language processing, deep learning, graph neural networks, information retrieval and recommender systems.

Education

University of Montreal

PhD, Computer Science — Fall 2020 - present
Thesis topic: Deep learning for software engineering, multimodal learning
Advisor: Prof. Houari Sahraoui

Research Internship — Fall 2019 - Fall 2020
Advisor: Prof. Houari Sahraoui

University of Namur, Belgium

MSc., Computer Science and Data Science — 2018 - 2020
Thesis advisor: Prof. Houari Sahraoui
Grade: 19/20 (*highest grade*)

BSc., Computer Science, Minors Mathematics — 2015 - 2018

Scholarships

Scholarship for Excellence, DIRO (University of Montreal) — 2021
Google Scholarship for Excellence, DIRO (University of Montreal) — 2021
1 year of full-time research fundings
Scholarship for Excellence, DIRO (University of Montreal) — 2020
Research Scholarship, Mitacs Globalink Canada — Spring 2020

Community Services

SOSYM Journal AI-MDE Theme Issue, *Peer Reviewing* — 2021
IEEE SANER Conference, *Peer Reviewing* — 2021
ACM/IEEE MODELS Conference, *Student Volunteer* — 2020
IEEE Transactions on Software Engineering, *Peer Reviewing* — 2020
Data & Models Workshop, *Participant* — 2020
Participant of a workshop about the role of artificial intelligence in model-driven engineering organized at McGill's Bellairs Research Institute.
(http://www.bellairs2020.ece.mcgill.ca/index.htm)

Teaching

University of Namur

INFOB318 - Individual bachelor project, *Project Supervisor* 2020 - 2021

INFOB131 - Introduction to programmation, *Teaching Assistant* Fall 2020

Students (co)-supervision

Aton Kamanda (MSc)

Lucas Maes (MSc)

Past students

Bastien Nicolas (MSc.) Spring 2021

Learning from Code Flow Dependencies using Graph Neural Networks for Code Refactoring

Lucas Maes (BSc.) Fall 2020 - Spring 2021

Code Documentation Generation Plug-In Development using Pretrained Language Models

Aton Kamanda (BSc.) Fall 2020 - Spring 2021

Code Search Plug-In Development using Pretrained Language Models

Publications

M. Weyssow, H. Sahraoui & B. Liu (2022)
Better Modeling the Programming World with Code Concept Graphs-augmented Multi-modal Learning
44th IEEE International Conference on Software Engineering, New Ideas and Emerging Results (ICSE-NIER'22)

M. Weyssow, H. Sahraoui & E. Syriani (2021)
Recommending Metamodel Concepts during Modeling Activities with Pre-Trained Language Models
arXiv preprint arXiv:2104.01642.
Software and Systems Modeling, theme issue on AI-enhanced Model-Driven Engineering

Mussbacher, G., Combemale, B., Kienzle, J. et al. (2020)
Opportunities in intelligent modeling assistance
Software and Systems Modeling

M. Weyssow, H. Sahraoui, B. Vanderose & B. Frénay (2020)
Combining Code Embedding with Static Analysis for Function-Call Completion
arXiv preprint arXiv:2008.03731

G. Mussbacher, B. Combemale, S. Abrahão, N. Bencomo, L. Burgueño, G. Engels, J. Kienzle, T. Kühn, S. Mosser, H. Sahraoui, **M. Weyssow** (2020)
Towards an Assessment Grid for Intelligent Modeling Assistance
2nd Workshop on Artificial Intelligence and Model-driven Engineering