# David Beauchemin

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🐙 See GitHub ↗*
🔗 See profile ↗*

## Education

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|---|---|
| 2020 – <br> UNIVERSITÉ LAVAL | **Doctor of Philosophy, Computer Science \| Machine Learning \| Natural Language Processing** <br> Laval University <br> GRAIL - Group for Research in Artificial Intelligence of Laval University ↗* |
| 2018 – 2020 <br> UNIVERSITÉ LAVAL | **Master's degree in Computer Science \| Machine Learning \| Natural Language Processing** <br> Laval University <br> GRAIL - Group for Research in Artificial Intelligence of Laval University ↗* <br> Thesis subject: *Détection de doublons parmi des informations non structurées provenant de sources de données externes* |
| 2015 – 2018 <br> UNIVERSITÉ LAVAL | **Bachelor's degree in actuarial sciences** <br> Laval University |

## Experiences

### Professional

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| 2019 – <br> B. | **Applied AI Researcher in Natural Language Processing** <br> Baseline <br> Applied AI research for clients & specialized formation in AI |
| 2019 – 2021 <br> Poutyne | **Developer** <br> Poutyne ↗* <br> Feature developement |
| 2019 – <br> Open Layer | **Founder, Researcher, and Interviewer** <br> OpenLayer podcast ↗* <br> AI content creation |
| 2018 – <br> Meetup Machine Learning Québec | **Event planning** <br> Meetup Machine Learning Quebec <br> Co-organization of events in Quebec city |
| 2019 – 2020 <br> V | **AI scientist** <br> Vooban <br> Technical advisor in artificial intelligence |

### Teaching

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|---|---|
| 2022 – <br> UNIVERSITÉ LAVAL | **Lecturer** <br> Laval University <br> Advance Databases |
| 2016 – 2022 <br> UNIVERSITÉ LAVAL | **Teaching Assistant** <br> Laval University, École d'actuariat <br> *Introduction à l'actuariat I, Gestion du risque financier I, Analyse et traitement collectif du risque, Informatique pour actuaire, Méthodes numériques en actuariat, Mathématiques actuarielles IARD II, Modèles linéaires en actuariat, Programmation avec R pour l'analyse de données* |
| 2019 – 2020 <br> UNIVERSITÉ LAVAL | **Teaching Assistant** <br> Laval University, BDRC - Big Data Research Center <br> Winter school in machine learning |

# Research

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|---|---|
| 2020 – 2022 | **Research Assistant**<br>Laval University, IID - Institute Intelligence and Data<br>Female Workers Facing the Challenge of Digital Transformation: A Case Study in the Insurance Sector<br>Christian Gagné, Future skills centre |
| 2020 | **Research Assistant**<br>Laval University, *École d'actuariat*<br>*Plateforme libre de validation et d'étalonnage de prévisions financières et actuarielles*<br>Vincent Goulet, Laval University actuarial science research chair |
| 2019 | **Research Assistant**<br>Laval University, GRAIL - Group for Research in Artificial Intelligence of Laval University<br>Information gathering using external unstructured data sources<br>Luc Lamontagne, NSERC/Intact Financial Corporation Industrial Research Chair in Machine Learning for Insurance |
| 2019 | **Research Assistant**<br>Laval University, GRAIL - Group for Research in Artificial Intelligence of Laval University<br>Learning taxonomy of professional skills<br>Luc Lamontagne, ENGAGE project |
| 2018 | **Research Assistant**<br>Laval University, *École d'actuariat*<br>Intergenerational equity: metrics for conditional indexation in pension plans<br>Louis Adam, Laval University actuarial science research chair |
| 2018 | **Research Assistant**<br>Laval University, GRAIL - Group for Research in Artificial Intelligence of Laval University<br>Weighted bootstrapping method for word relation extraction<br>Luc Lamontagne |

# Publications

## Article

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|---|---|
| 2022 | David Beauchemin and Marie-Claire Monty. La discrimination en intelligence artificielle est-elle suffisamment encadrée ⬀*. 2022. hal-03736828v2 |
| 2022 | Vincent Primpied, David Beauchemin and Richard Khoury. Quantifying French Document Complexity ⬀*.Proceedings of the Canadian Conference on Artificial Intelligence. https://doi.org/10.21428/594757db.8b7cd94b |
| 2022 | David Beauchemin, Julien Laumonier, Yvan Le Ster, Marouane Yassine. "FIJO": a French Insurance Soft Skill Detection Dataset ⬀*. Proceedings of the Canadian Conference on Artificial Intelligence. https://doi.org/10.21428/594757db.858dd91f |
| 2021 | Marouane Yassine, David Beauchemin, François Laviolette and Luc Lamontagne. Multinational Address Parsing: A Zero-Shot Evaluation ⬀*. International Journal of Information Science and Technology, [S.l.], v.6, n.3, p.40 - 50, sep. 2022. ISSN 2550-5114 |
| 2020 | David Beauchemin, Nicolas Garneau, Eve Gaumond, Pierre-Luc Déziel, Richard Khoury and Luc Lamontagne. *Generating Intelligible Plumitifs Summaries: Use Case Application with Ethical Considerations* ⬀*. The 13th International Conference on Natural Language Generation. |
| 2020 | Marouane Yassine, David Beauchemin, François Laviolette and Luc Lamontagne. *Leveraging Subword Embeddings for Multinational Address Parsing* ⬀*. IEEE CiSt'20, MNLP. |
| 2019 | Nicolas Garneau, Mathieu Godbout, David Beauchemin, Audrey Durand and Luc Lamontagne. *A Robust Self-Learning Method for Fully Unsupervised Cross-Lingual Mappings of Word Embeddings: Making the Method Robustly Reproducible as Well* ⬀*. REPORLANG@LREC2020. |

## Other publication

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| 2017 | David Beauchemin and Vincent Goulet *Typesetting actuarial symbols easily and consistently with actuarialsymbol and actuarialangle* ⬀ * |

### Packages

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| 2020 | Marouane Yassine et David Beauchemin *Deepparse: A state-of-the-art deep learning multinational addresses parser* ✦* |
| 2019 | David Beauchemin *Notif: The notification package for every python project* ✦* |
| 2017 | Simon-Pierre Gadoury and David Beauchemin *nCopula: Hierarchical Archimedean Copulas Through Multivariate Compound Distributions* ✦* |
| 2017 | Vincent Goulet and David Beauchemin *actuarialsymbol - Actuarial notation with LaTeX* ✦* |

## Funding and Scholarships

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| 2022 – 2025 | **Research Grant** <br> *Fonds de recherche du Québec - Nature and technologies* |
| 2020 – | **Research Grant** <br> *Forage de données d'assurance : techniques, éthiques, et sécurité* |
| 2020 | **Entrance Scholarship** <br> Doctoral Entrance Scholarship |
| 2019 – 2020 | **Research Grant** <br> NSERC/Intact Financial Corporation Industrial Research Chair in Machine Learning for Insurance <br> Software engineering development of Poutyne deep learning framework |
| 2019 | **Research Grant** <br> NSERC/Intact Financial Corporation Industrial Research Chair in Machine Learning for Insurance <br> Information gathering using external data sources |
| 2018 | **Gaston Paradis Excellence Award** <br> Laval University <br> Social involvement |
| 2018 | **Yves-Roy Award** <br> Laval University <br> Best software engineering term project |