

# David Beauchemin

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🔄 See GitHub

🌐 See profile

## Education

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

## Experiences

### Professional

2019 –	<b>Applied AI Researcher in Natural Language Processing</b> Baseline Applied AI research for clients & specialized formation in AI
2019 –	<b>Developer</b> Poutyne Feature developement
2019 –	<b>Founder, Researcher, and Interviewer</b> OpenLayer podcast AI content creation
2018 –	<b>Event planning</b> Meetup Machine Learning Quebec Co-organization of events in Quebec city
2019 – 2020	<b>AI scientist</b> Vooban Technical advisor in artificial intelligence

### Teaching

2016 –	<b>Teaching Assistant</b> Laval University, École d'actuariat <i>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</i>
2019 – 2020	<b>Teaching Assistant</b> Laval University, BDRC - Big Data Research Center Winter school in machine learning

## Research



2020 –

### Research Assistant

Laval University, IID - Institute Intelligence and Data

Female Workers Facing the Challenge of Digital Transformation: A Case Study in the Insurance Sector

Christian Gagné, Future skills centre



2020

### Research Assistant

Laval University, *École d'actuariat*

*Plateforme libre de validation et d'étalonnage de prévisions financières et actuarielles*

Vincent Goulet, Laval University actuarial science research chair



2019

### Research Assistant

Laval University, GRAIL - Group for Research in Artificial Intelligence of Laval University

Information gathering using external unstructured data sources

Luc Lamontagne, NSERC/Intact Financial Corporation Industrial Research Chair in Machine Learning for Insurance



2019

### Research Assistant

Laval University, GRAIL - Group for Research in Artificial Intelligence of Laval University

Learning taxonomy of professional skills

Luc Lamontagne, ENGAGE project



2018

### Research Assistant

Laval University, *École d'actuariat*

Intergenerational equity: metrics for conditional indexation in pension plans

Louis Adam, Laval University actuarial science research chair



2018

### Research Assistant

Laval University, GRAIL - Group for Research in Artificial Intelligence of Laval University

Weighted bootstrapping method for word relation extraction

Luc Lamontagne

## Publications

### Article

- 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

- 2017 David Beauchemin and Vincent Goulet *Typesetting actuarial symbols easily and consistently with `actuarialsymbol` and `actuarialangle`*

### Packages

- 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  $\text{\LaTeX}$*

## Communications

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### Workshops

- 2019 *Les tests automatisés en R*  
*R à Québec*
- 2019 *Extraction d'information à partir du Web*  
Actulab
- 2019 *Atelier pratique en git*  
Meetup Machine Learning Quebec
- 2017 *Formation d'introduction à R*  
*R à Québec*
- 2017 **R & Markdown**  
*École d'actuariat*

### Presentations

- 2020 *La reproductibilité en apprentissage automatique*  
Webinaires de l'IID  
Laval University, Canada
- 2020 **Detection of Duplicates Among Non-structured Data From Different Data Sources**  
Séminaires IID  
Université Laval, Canada
- 2020 **Intelligibility of digital court records: the criminal docket experience**  
Cyberjustice laboratory
- 2020 *Détection de doublons parmi des informations non structurées provenant de sources de données externes*  
Intact scientific workshop  
Laval University, Canada
- 2019 *Bonnes pratiques & git*  
IFT-6010  
Laval University, Canada
- 2019 *Assurance Qualité, calcul scientifique & R*  
R à Québec & CLESSN  
Laval University, Canada
- 2019 **Information gathering using external unstructured data sources**  
Intact scientific workshop  
Laval University, Canada
- 2019 *Classification de doublons de risques commerciaux*  
Intact scientific workshop  
Laval University, Canada
- 2019 *Introduction à Scikit-learn*  
Summer school of the Group for Research in Artificial Intelligence of Laval University interns  
Laval University, Canada
- 2018 *Système de gestion des bénévoles Agapè*  
GLO-7035  
Laval University, Canada
- 2017 *Où sont les clients que nous ciblons?*  
Actulab  
Laval University, Canada

### Blog Article

- 2020 **Training a Recurrent Neural Network (RNN) Using PyTorch**  
.Layer

## Funding and Scholarships

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

## Award and Distinctions

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2016 – 2018	<b>Gala for the student excellence</b> AESGUL (Association des Étudiants en Sciences et Génie de l'Université Laval) Social involvement
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## Community Involvement

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### Committee

2020 –	<b>R à Québec Organization Committee</b> President of organization of the workshop sessions Laval University, Canada
2020 –	<b>Editorial Blog Committee</b> President .Layer
2020 –	<b>Committee Data Universal Tool Development</b> President .Layer
2020	<b>Co-design AI Prospective Workshop</b> Participant IOSIAIDT - International Observatory on the Societal Impacts of Artificial Intelligence and Digital Technology
2019 – 2020	<b>Committee for the improvement of teaching evaluations</b> Participant Faculty of Science and Engineering, Laval University
2018	<b>Organisational committee for Machine Learning in Insurance Week</b> Participant Meetup Machine Learning Quebec

## Jury

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| 2018 – | <b>Member of the Jury</b><br>My assignment in 180 seconds<br><i>École d'actuariat</i> , Laval University                                 |
| 2019 – | <b>Member of the Jury</b><br>Presentation of the assignment<br>Department of Computer Science and Software Engineering, Laval University |

## Cooperative

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| 2020 – | <b>Baseline</b><br>Chairman of the Board of Directors of Baseline, a worker cooperative in artificial intelligence<br>Quebec, Canada |
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## Non-Profit Associations

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| 2019 –      | <b>.Layer</b><br>Vice-president of business development<br>Quebec, Canada                               |
| 2016 – 2018 | <b>AÉACT (Association des Étudiants en Actuariat de l'Université Laval)</b><br>Laval University, Canada |



## Podcast

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| 2020 – | <b>IA &amp; café</b><br>Invited co-host of the podcast <i>IA &amp; café</i> |
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