

# Daniel Lemire *Computer scientist*

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Montreal, Canada • Canadian Citizen • Father of two clever boys

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## Summary

I have been an entrepreneur, a government researcher and a university professor. I have been programming software since I was 12 years old and I never stopped. My contributions appear in several open-source projects: Git, Apache Hive, Apache Spark, Apache Lucene, Netflix Atlas, LinkedIn Pinot, Elastic, TensorFlow, Apache Kylin, Druid. I am a beneficiary of the Google Open Source Peer Bonus Program.

## Writing (with collaborators)

- I have written over [45 refereed publications](#) and I have been cited thousands of times.
- [My blog](#) has been featured on Reddit, Hacker News and Slashdot.

## Software (with collaborators)

**Roaring bitmap** Fast bitmaps used by Apache Spark • Apache Kylin • Druid • Lucene, Solr, Elastic

**JavaFastPFOR** Fast integer compression used by Lucene 4.x

**EWAH** Fast bitmaps used by Apache Hive • Git

## Recent experience

[LICEF Research Center](#) • [TELUQ, Université du Québec](#) MONTREAL, CANADA

**Computer Science Professor** 2004–

Promoted to full professor early (2009). Funded by NSERC Discovery grants (2003-2007, 2007-2012, 2012-2017) in computer science. Program committee member at major conferences (ACM SIGIR, ACM CIKM, ACM WSDM, ACM RecSys).

[National Research Council of Canada](#) CANADA

**Research Officer** 2002–2004

Founded and lead the e-Health research group. Designed the [Slope One algorithm](#).

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## Education

[Ecole Polytechnique](#) • [Université de Montréal](#) MONTRÉAL, CANADA

**Ph.D. in Engineering Mathematics (graduated in 2  $\frac{1}{2}$  years)** 1998

[University of Toronto](#) TORONTO, CANADA

**B.Sc. and M.Sc. (very high distinction, master completed in one year)** 1994, 1995

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## Skills

**Can program productively in** Java, C++, C, Python, Go, Swift, JavaScript

**Fluent in** French (*mother tongue*), English (*full professional proficiency*).