

## Jon G. MacKay

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CONTACT	<i>E-mail:</i> jon.mackay@gmail.com <i>Website:</i> www.jgmackay.com
RESEARCH INTERESTS	Business and politics, business history, corporate governance, management of technological innovation, network theory, regional economic development
MEMBERSHIPS	Academy of Management (AOM), Canadian Business History Association (CBHA), IE-Scholars, International Network for Social Network Analysis (INSNA)
CITIZENSHIP	Canadian
EDUCATION	<b>Ph.D., Management Sciences</b> <i>University of Waterloo</i> , Waterloo, Ontario, Canada (2013) <ul style="list-style-type: none"><li>• Dissertation Title: “Exploring the Links Between Corporate Governance and Firm Performance: An Examination of the Social Capital of Corporate Insiders”</li><li>• Advisor: Rod McNaughton</li></ul> <b>M.A., Economics</b> , Co-op work placement with Statistics Canada (2008) <i>University of Waterloo</i> , Waterloo, Ontario, Canada <b>B.A., Honours</b> (1996) <i>University of Waterloo</i> , Waterloo, Ontario, Canada
HONOURS AND AWARDS	<ul style="list-style-type: none"><li>• WICI Data Challenge Prize for “JUST: A Network Simulation Toolkit for Complex Systems Researchers”, 2013</li><li>• Ontario Graduate Scholarship, 2012</li><li>• Aapoolcoyuz Biman Memorial Graduate Scholarship, 2012</li><li>• University of Waterloo President’s Graduate Scholarship, 2012</li><li>• Ontario Graduate Scholarship in Science and Technology, 2011</li><li>• Ontario Graduate Scholarship in Science and Technology - Management Sciences, 2011</li><li>• University of Waterloo Staff Association Graduate Award, 2011</li><li>• University of Waterloo Graduate Scholarship, 2009, 2011</li><li>• Balsillie Fellowship, 2007</li><li>• University of Waterloo Graduate Entrance Scholarship, 2007</li></ul>
ACADEMIC AND PROFESSIONAL EXPERIENCE	<b>Affiliate Researcher</b> <span style="float: right;"><b>Current</b></span> <i>Waterloo Institute for Complexity and Innovation (WICI)</i> , University of Waterloo, Canada I am conducting academic research under the auspices of WICI.  <b>Sessional Instructor - Department of History</b> <span style="float: right;"><b>Current</b></span> <i>Wilfrid Laurier University</i> , Canada I am developing and teaching a course called <i>Digital Creativity</i> for WLU. This is a unique course offering that introduces students in the liberal arts to technology and logic. The major course project involves students developing a historical case-study of a Canadian business.  <b>Course Instructor</b> <span style="float: right;"><b>June 2017 - Aug 2017</b></span> <i>University of the People (uopeople.edu)</i> , Online MBA program Pasadena, CA, USA University of the People is a registered non-profit that provides students from across the world with access to a low-cost, high-quality education. I am teaching an online MBA course on organizational behavior.

**Teaching Assistant - Canadian Business History MBA Course**    **Sept 2016 - Dec 2016**  
*Rotman School of Management, University of Toronto, Canada*

My work included marking MBA assignments and presentations, answering questions, and assisting with the lectures each week.

**Research Fellow - Centre for Corporate Reputation**    **June 2013 - Dec 2015**  
*Saïd Business School, University of Oxford, Oxford, U.K.*

My research at the Centre focused on how social capital and reputation are related to decision making and outcomes in and between organizations. I also developed and taught classes about reputation, innovation and social networks.

**Course Marker - Saïd Business School MBA Program**    **June 2013 - Dec 2015**  
*Saïd Business School, University of Oxford, Oxford, U.K.*

I acted as a marker for a series of MBA and professional diploma courses offered by the Saïd Business School. Courses included: Global Strategy, Organisational Leadership, Strategy & Innovation and Business History.

**Consulting Economist (Self-employed)**    **May 2008 - August 2008**

Client: *Regional Municipality of York, York Region, Ontario, Canada*

Conducted regional economic analysis of the Region of York. Explained the importance of regional employment changes to city staff and contextualized work within a larger initiative to understand employment challenges facing the region. Work culminated in the report:

- “Regional Shift-Share Analysis: Changes in Employment Growth and Implications for York Region.”

**Research Economist / Software Developer**    **September 2007 - April 2008**

*Statistics Canada - Socio-Economic Analysis and Modelling Division, Ottawa, Ontario, Canada*

Used and contributed bug fixes to LifePaths, a longitudinal microsimulation model of the Canadian economy developed at Statistics Canada. I created a software module designed to simulate immigrant populations in Canada. I compared the data generated from the simulation model to the actual experience of immigrants as recorded in the Census and the Labour Force Survey. Work culminated in the report:

- “A Comparison of Real and Simulated Immigrants: Data from the Census Compared to the LifePaths Microsimulation Model.”

**Technical Consultant / Researcher**    **September 2006 - August 2007**

*Centre for International Governance Innovation (CIGI), Waterloo, Ontario, Canada*

I worked with the head librarian at the growing think tank to outline trends in digital storage and distribution of academic materials. Based on this, I helped to develop strategies for CIGI. I also conducted research for the lead marketing manager at CIGI to assist with developing the profile of this new think tank.

**Technical Consultant**    **May 2006 - August 2006**

*Peaceworks Computer Consulting (PCC), Waterloo, Ontario, Canada*

Managed and implemented a complex content management system for an international development non-governmental organization (NGO). Working with numerous stakeholders, clarified requests and iteratively developed features that met the needs of a large international NGO.

**Java Software Developer**    **May 2000 - August 2005**

*Research In Motion, Waterloo, Ontario, Canada*

Lead software developer in charge of BlackBerry device localization system. I routinely dealt with multiple stakeholders within RIM and external translators who were charged with internationalizing BlackBerry. I synthesized requirements and developed software in RIM’s integrated development environment to manage all localization across RIM’s entire line of BlackBerry devices. My efforts resulted in sharp drop in translation costs and turnaround times from translators. I wrote customized integration software tools that saved time and money by merging resource files into different code lines without manual intervention.

**I.T. Systems Integrator / Software Developer**

**May 1997 - August 2000**

*Research In Motion*, Waterloo, Ontario, Canada

Designed and developed web-based applications to provide custom access to the company's internal systems. As a lead developer in charge of web-based services, I worked to redesign and scale the external corporate websites to handle traffic as the organization grew exponentially. I developed strategy for scaling web-based services while also handling challenges as they arose in a rapidly growing technology company.

**Technical Researcher and Web Developer**

**May 1997 - August 1997**

*Institute for Innovation Research (IIR)*, *University of Waterloo*, Waterloo, Ontario, Canada

Researched and evaluated technically feasible delivery mechanisms for Management Sciences' first online course offering: Master of Technology. The goal of the program was to allow remote students access to real-time classes over the internet. At that time, online courses were still in the early development stages. The online program still exists today.

JOURNAL  
ARTICLES

Bendix, W., **MacKay, J.** "Partisan Infighting Among House Republicans: Leaders, Factions, and Networks of Interests" *Legislative Studies Quarterly*, Available early access March (2017).

<https://doi.org/10.1111/lsq.12168>

**MacKay, J.**, "Networks of Canadian Business Elites: Historical Corporate Interlock Networks circa 1912" (Forthcoming: *Connections*)

Brox, J., Carvalho, E., and **MacKay, J.** "Regional Employment Changes in a Booming Resource Economy: A Modified Shift-Share Analogue Regression of Changes in Employment Patterns Within the Economic Regions of Alberta." *Canadian Journal of Regional Science* 33, no. 2 (2008): 25-44.

BOOK  
CHAPTERS

**MacKay, J.** Forthcoming. Canadian Regional and National Business Elites in 1912: Who Was Connected, Who Wasn't and Why? In W. Pettigrew & D. Smith (Eds.), *The Social Life of Business: A History, 1450-1950* Palgrave Macmillan, Basingstoke, United Kingdom.

**MacKay, J.** 2015. "Network Theory." *The SAGE Encyclopedia of Corporate Reputation*, edited by Craig Carroll. Thousand Oaks, CA, U.S.A.: SAGE.

BOOK  
REVIEWS

**MacKay, J.** 2017. "Harrison McM Cain: Single Minded Purpose" *The Prospectus: The Newsletter of the Canadian Business History Association*, edited by Stephen Salmon. Toronto, Canada.

REVISE &  
RESUBMIT

**MacKay, J.** "Communities in International Trade Networks, 1870-2014", *Network Science*

UNDER REVIEW

**MacKay, J.** "Dealing with Big Data and Network Analysis Using Neo4j and Python" *Programming Historian* (Programming Historian works under a system of radical transparency. You can see the paper here: <https://goo.gl/1o4LHC>)

PAPERS IN  
PREPARATION

**MacKay, J.**, Wilson, J.D. "Creative Workers and Regional Cartels: Network Approaches to Detecting Collusion in Regional Labor Markets" (Target Journal: *Journal of Economic Geography*)

**MacKay, J.**, McNaughton, R. "Family Firms and Social Structure: Examining Firm Performance Using Social Capital Theory" (Target Journal: *Family Business Review*)

**MacKay, J.**, Bendix, W. "Social Capital and the Policy Influence of Silicon Valley: Examining the Tech Sector's Access to the U.S. Congress" (Target journal: *Business and Politics*)

- INVITED TALKS **MacKay, J.** 2016, October 25. Partisan Infighting Among House Republicans: Leaders, Factions and Complex Networks of Interests. Presented at the Waterloo Institute for Complexity and Innovation (WICI) Speaker Series, Quantum-Nano Centre, University of Waterloo.  
**Video:** <https://goo.gl/3Rv1nF>
- MacKay, J.** November 2015. “Internationalization of the Firm: The Role of Social Capital in FDI Decisions,” 2015 Invited Talk, Saïd Business School, University of Oxford.
- OPINION-EDITORIAL **MacKay, J.,** Bendix, W. 2017, March 26. Republican infighting key for candidate Trump. Now it’s a roadblock. The Globe and Mail. Toronto, Ontario, Canada. <http://goo.gl/RQA4Ov>.
- MEDIA COVERAGE Our research paper, “Partisan Infighting among House Republicans: Leaders, Factions, and Networks of Interests” was the basis for discussion on the CBC television program Power and Politics. 2017, March 28. Power and Politics. Toronto, Ontario, Canada: CBC. <https://goo.gl/cUuIuv>
- CONFERENCE PRESENTATIONS **MacKay, J.** May 2016. “Canadian Regional and National Business Elites in 1912: Who Was Connected, Who Wasn’t and Why?” From Public Interest To Private Profit: The Changing Political and Social Legitimacy of International Business, Rotman School of Management, University of Toronto. Canada.
- MacKay, J.,** Wilson, J. D. April 2016. “The Silicon Valley Wage Cartel: How Cartel Membership Spreads and Its Impact on Management Job Transitions” Sunbelt Conference of the International Network for Social Network Analysis (INSNA), California, USA.
- MacKay, J.** October 2015. “Internationalization of the Firm: The Role of Social Capital in FDI Decisions,” 2015 Academy of International Business Conference ‘Breaking Up the Global Value Chain: Possibilities and Consequences,’ Milan, Italy.
- MacKay, J.** August 2015. “Banking on Reputation: The Role of Social Ties in Syndicated Lending,” Academy of Management Conference, Vancouver, B.C., Canada.
- MacKay, J.** June 2015. “Observing Advantage: The Role of Cognition in the Marketplace for Syndicated Loans,” Sunbelt Conference of the International Network for Social Network Analysis (INSNA), Brighton, U.K.
- Bendix, W., **MacKay, J.** June 2015. “Leaders, Factions, and Networks of Interests: Partisan Infighting among House Republicans,” Political Networks Conference 2015, Portland, OR, U.S.A.
- Bendix, W., **MacKay, J.** April 2015. “Partisan Infighting: Intraparty Factions and Leadership Strategies in the U.S. House,” Midwest Political Science Association (MPSA) Annual Conference, Chicago, U.S.A.
- MacKay, J.** Sept. 2014. “Partisan Infighting Understood Through Multiple Reputations: Intraparty Factions and Leadership Strategies in the U.S. House of Representatives,” Corporate Reputation Symposium, Oxford, U.K.
- Brox, J., Carvalho, E., and **MacKay, J.** 2008. “Regional Employment Changes in a Booming Resource Economy,” International Banking, Economics and Finance Association Conference, Honolulu, Hawaii.
- Brox, J., Carvalho, E., and **MacKay, J.** 2007. “Regional Employment Changes in a Booming Resource Economy,” Canadian Regional Science Association, Mississauga, Ontario, Canada.

INDUSTRY  
REPORTS

**MacKay, J.** “Report from ICSB Global Entrepreneurship Conference 2010: The Latest on Business Creation,” Waterloo, Ontario, Canada: Centre for Business, Entrepreneurship and Technology (CBET), 2010.

**MacKay, J.** “Regional Shift-Share Analysis: Changes in Employment Growth and Implications for York Region Report,” Report for Regional Municipality of York, Ontario, Canada, 2008.

**MacKay, J.** “A Comparison of Real and Simulated Immigrants: Data from the Census Compared to the LifePaths Microsimulation Model,” Technical Report. Ottawa, Ontario, Canada: Statistics Canada, March 2008.

TEACHING  
EXPERIENCE

**Organizational Behavior**

**Current**

*University of the People (uopeople.edu)*, Online MBA program Pasadena, CA, USA

University of the People is a registered non-profit that provides students from across the world with access to low-cost, high-quality education. I am currently teaching an online MBA course on organizational behavior.

**Humanities 101: Introduction to Economic Change in Cities**

**July, 2017**

Humanities 101 is a volunteer-run program designed to give individuals from the local community an opportunity to take a university-level survey course designed to give them an appreciation for higher learning. The theme this year’s course was the city. My contribution was a class entitled “Economic Change in Cities: Regional Economic Theory and the Modern City”. This class largely built off of a research I did on the history of economic development in Kitchener, Ontario, Canada.

**Introduction to Network Theory**

**March, 2017**

Developed and taught an introduction to social network analysis and innovation, “Network Analysis for Fun and Profit” for participants in the Wilfrid Laurier StartHacks hacking competition.

**Reputation, Innovation and Networks**

**2014-2015**

Developed and taught “Reputation, Innovation and Social Networks” strategy component of the Oxford MBA in 2014 and 2015.

**Network Reading Group Meetings**

**2011-2012**

I founded and ran the University of Waterloo’s Network Reading Group, affiliated with and supported by the Waterloo Institute for Complexity Innovation (WICI). Each week I facilitated the meeting, booking rooms, advertising speakers and finding new presenters. I regularly ran meetings on topics ranging from mathematical network theory to economic sociology.

MARKING  
EXPERIENCE

- Organizational Behavior, Masters of Business Administration, University of the People
- Canadian Business History, Rotman School of Management, University of Toronto.
- Oxford Diploma in Strategy and Innovation, Saïd Business School, University of Oxford.
- Diploma in Organisational Leadership, Saïd Business School, University of Oxford.
- EMBA/MBA Business History, Saïd Business School, University of Oxford.

SERVICE

**Reviewing**

- Annual Meeting of the Academy of Management, 2015-2017
- Annual Meeting of the Academy of International Business, 2016
- Strategic Management Society Annual Meeting, 2015, 2016

**Judge & Workshop Presenter for StartHacks Hackathon** **March, 2017**

*Wilfrid Laurier University, Waterloo, Ontario, Canada*

This entrepreneurial competition brought together business students with technical students. The teams were challenged to create a minimally viable product and present a five-minute business plan pitch at the end of 24 hours. I judged the final pitches and hacks resulting from this competition.

**Network Reading Group** **2011 - 2012**

*University of Waterloo, Waterloo, Ontario, Canada*

I founded, organized and often presented at a cross-disciplinary reading group concerned with network theory and science at the University of Waterloo. The group became a forum for sharing research across disciplines such as management science, environmental studies, electrical and civil engineering. Participants who attended meetings virtually included Canadian and international researchers.

- Website maintains information and archives of past meetings: [www.networkscience.org](http://www.networkscience.org)

**Open Source / Free Software** **2010 - 2012**

*University of Waterloo, Waterloo, Ontario, Canada*

- Transcription software - Free software for academics to transcribe interviews.  
See [jgmackay.com/Misc/](http://jgmackay.com/Misc/)
- Data analysis utilities - Library for Statistics Canada (CANSIM) file manipulation.  
See [jgmackay.com/Misc/](http://jgmackay.com/Misc/)
- Contributions to Open Source “GeoLayout” plugin for Gephi Network Visualization Software.  
This software allows for mapping of network data given appropriate latitude and longitude information. My contribution was to extend functionality to graphs that change over time.

PATENTS

**MacKay, J.** and Mathew Bells. “Localization of Resources Used By Applications In Hand-Held Electronic Devices And Methods Thereof”, 2004. Assignee: Research In Motion

PROFESSIONAL  
DEVELOPMENT

**University of Waterloo Teaching and Learning Conference** **2017**

*Workshops at University of Waterloo 2015, Waterloo, ON., Canada*

Attended workshops on the latest teaching advances from educators across Canada. Topics covered included the latest experiences with flipped classrooms, online teaching and learning, and classroom exercises.

**Network Methods** **2015**

*Workshops at Sunbelt Conference 2015, Brighton, U.K.*

Attended various workshops dealing with the most recent trends in network methodologies and software. Topics included MR-QAP, ERGMs, and network software such as ORA and Stata.

**Exponential Random Graph Modelling (ERGM)** **2015**

*Series of ERGM Workshops at PolNet 2015, Portland, OR, U.S.A.*

Attended a series of workshop seminars focused on ERGM modelling in general and the latest trends in research. Topics covered included panel methods as well as generalized ERGM models.

**Preparing for University Teaching** **2010**

*University of Waterloo, Waterloo, Ontario, Canada*

Completed series of practicums provided by the Centre for Teaching Excellence at the University of Waterloo. Seminars were composed of workshops, discussion and response papers intended to improve university-level teaching.

**Conference on Panel Study of Entrepreneurial Dynamics (PSED)** **2010**

*International Council for Small Business (ICSB) Conference, Washington DC, U.S.A.*

Attended ICSB conference on entrepreneurship data, methods and associated research. The conference included special emphasis on the Panel Study of Entrepreneurial Dynamics (PSED) longitudinal data set. I authored a report for the University of Waterloo’s Centre for Business, Entrepreneurship and Technology (CBET) on my findings from the conference.

- COMPUTER SKILLS
- Statistical Packages / Languages: Stata, R, S-Plus, experience with SAS
  - Familiar Languages: python, java, javascript, perl, php, Cypher, SQL, bash, some C++ and C#
  - Applications: Neo4j, MySQL, Oracle, L<sup>A</sup>T<sub>E</sub>X, word processing, spreadsheet and presentation software
  - Operating Systems: Unix/Linux, OS X, Windows