# Colin David Conrad

## Curriculum Vitae

Dalhousie University School of Information Management Kenneth C. Rowe Management Building 6100 University Avenue Halifax, NS, B3H 4R2, Canada email: colin.conrad@dal.ca website: https://colinconrad.com

#### ACADEMIC APPOINTMENTS

- 2022 Cross appointment, Rowe School of Business, Dalhousie University, Halifax, NS, Canada
- 2021 Cross appointment, Faculty of Computer Science, Dalhousie University, Halifax, NS, Canada.
- 2021 Cross appointment, Department of Psychology and Neuroscience, Dalhousie University, Halifax, NS, Canada.
- 2019 Assistant Professor (tenure-track, primary appointment), School of Information Management, Dalhousie University, Halifax, NS, Canada
- 2018 2019 Lecturer (limited term), Dalhousie University, Rowe School of Business, Halifax, NS, Canada
- 2015 2017 Adjunct Lecturer, Faculty of Computer Science, Dalhousie University, Halifax, NS, Canada

### **EDUCATION**

2015 - 2019 Doctor of Philosophy, Dalhousie University

Thesis: A Neurophysiological Study of the Impact of Mind Wandering During Online Lectures

Supervisors: Dr. Aaron Newman and Dr. Michael Bliemel

2013 - 2015 Master of Electronic Commerce, Dalhousie University

Thesis: Predicting Political Donations using Data Driven Lifestyle Profiles Generated from

N-Gram Analysis of Heterogeneous Online Sources.

Supervisor: Dr. Vlado Keselj

2010 - 2011 Master of Arts, Queen's University

Research Project: Making Sense of Moral Relativism

Supervisor: Dr. David Bakhurst

2006 - 2010 Bachelor of Arts (Honours), Dalhousie University Research Project: Manufactured Conventions Supervisor: Dr. Duncan MacIntosh

#### **GRANTS & AWARDS**

#### Grants

- 2022 SSHRC Insight Development Grant (\$67,498; 10%). PI: Wranik, W. D. Collaborators: Caron, I., Kabat-Farr, D., and Conrad, C. Governing under uncertainty: Does public service motivation shield against burnout and boost job satisfaction?
- Digital Research Alliance of Canada Data Champions Pilot Project (\$49 998; 100%). PI: Conrad, C. Collaborator: Abramson, D. Beyond the black box: Unlocking the potential of digital humanities.
- 2021 Mitacs Accelerate Entrepreneur Grant (\$60 000; 100%). PI: Conrad, C. Student: Ogilvie, R. How do we measure emotional intelligence in remote team contexts?
- 2021 Mitacs Globalink Research Award (\$6000; 100%). PI: Conrad, C. Student: Nissen, A. A neural investigation of trust in digital influencers.
- 2021 Mitacs Accelerate Cluster Grant (\$80 000; 33%). PI: Keselj, V. Co-applicant: Conrad, C. Students: Latifi, S., Gawai, H. and Jariwala, G. An AI Approach to VLT Games Modeling.
- 2021 SSHRC Insight Development Grant (\$56 760; 90%). PI: Conrad, C. Collaborators: Klesel, M., Oschinsky, F. and Newman, A. What is the role of mind wandering in work productivity when using remote workplace platforms?
- 2021 Dalhousie University Scholarship of Teaching and Learning Grant (\$2989.88; 100%). PI: Conrad, C. Are short lectures better? An investigation of the impact of short design for asynchronous lectures.
- Dalhousie University Dean's Collaborative Grant (\$7 500; 33%). PI: Mongeon,
  P., Co-applicants: Cloutier, A. and Conrad, C. The mental health crisis in academia: Tracking mental health signals from academics' tweets.
- 2020 SSHRC Explore (\$5 000; 100%). PI: Conrad, C. What factors lead to gainful university online community experiences during COVID-19?
- 2020 Dalhousie University Accessibility and Accommodations Fund (\$2 400; 100%). PI: Conrad, C. Video Tutorials to Support Diverse Technical Learning.

### Awards

- 2019 Best Reviewer Award, 2019 NeuroIS Retreat, Vienna, Austria.
- 2017 2019 Killam Scholarship (Doctoral), Dalhousie University, Halifax, NS, Canada.
- 2016 2019 Post-Graduate Scholarship (Doctoral), Natural Sciences and Engineering Research Council of Canada, Ottawa, ON, Canada.
  - 2015 Nova Scotia Research and Innovation Graduate Scholarship Dalhousie University, Halifax NS, Canada.
  - 2013 First Prize, Halifax Startup Weekend 2013.
  - 2011 Graduate Philosophy Scholarship, Queen's University.
- 2006 2008 L. A. & Edith Upham Scholarship, Dalhousie University.

### RESEARCH

Note: Names of students I have supervised or co-supervised are underlined.

## **Journal Articles**

Conrad, C., Aziz, J., <u>Henneberry</u>, J. M. and Newman, A. J. (in press). Do emotions influence safe browsing? Towards an EEG marker of affective responses to cybersecurity notifications. Submitted to *Frontiers in Neuroscience*.

Conrad, C., Deng, Q., Caron, I., Shkurska, O., Skerrett, P., and Sundararajan, B. (2022). How student perceptions about online learning difficulty influenced their satisfaction during Canada's Covid-19 response. *British Journal of Educational Technology* 53(3), 534-557. 10.1111/bjet.13206

Conrad, C. and Newman, A. (2021). Measuring mind wandering during online lectures assessed with EEG. *Frontiers in Human Neuroscience 14*. 10.3389/fnhum.2021.697532

Klesel, M., Oschinsky, F., Conrad, C., and Niehaves, B. (2021). Does the type of mind-wandering matter? Extending the inquiry about the role of mind-wandering in the IT use experience. *Internet Research* 31(3), 1018-1039. 10.1108/INTR-05-2020-0262

Beaubien, L., Conrad, C., Music, J. and Toze, S. (2021). Web applications improve clinical acceptance of treatment outcome projections. *JMIR Formative Research* 5(7), e22110. 10.2196/22110

Conrad, C., Bliemel, M., & Ali-Hassan, H. (2019). The role of flow in learning distributed computing and mapreduce concepts using hands-on analogy. *Journal of Information Systems Education* 30(1), 57-66. http://jise.org/Volume30/n1/JISEv30n1p57.html

# **Published Conference Papers in Proceedings**

Conrad, C, Klesel, M., <u>Mayhew, K.</u>, <u>O'Neil, K.</u>, Oschinsky F. and <u>Usai, F.</u> (2022). Is your ability to detect errors an indicator of mind wandering? An experiment proposal. In *NeuroIS 2022 NeuroIS Retreat*.

Conrad, C. and Newman, A. (2022). Toward mind wandering adaptive online learning and virtual work experiences. In 2022 NeuroIS Retreat.

O. Diaz, G., and Conrad, C. (2021). Online communities and dating apps: The effects of social presence, trust, and Covid-19. *Proceedings of the 2021 Americas Conference on Information Systems (AMCIS)* 1139.

<u>Gone, P.</u> and Conrad, C. (2020). Comparing changes in attitudes towards COVID-19 expressed on social media: the case of USA and Canada. *Proceedings of the International Conference on Knowledge Management (ICKM)*.

Godfrey, D., Findlay, C., Mulchandani, D., Subramanilyer, R., Conrad, C., and Newman, A. (2020). Information systems applications for a tri-hybrid SSVEP, P300 and N170 brain-computer interface. In *2020 NeuroIS Retreat* (pp. 291-297). Springer.

Klesel, M., Schlechtinger, M., Oschinsky, F., Conrad, C. and Niehaves, B. (2020). Detecting mind wandering episodes in virtual realities using eye-tracking. In *2020 NeuroIS Retreat* (pp. 164-171). Springer.

Conrad, C., Agarwal, O., Woc, C. C., Chiles, T., <u>Godfrey, D.</u>, Krueger, K., Marini, V., Sproul, A. & Newman, A. (2020). On using python to run, analyze, and decode EEG experiments. In Davis F. D., Riedl R., vom Brocke J., Léger P. M., Randolph A., Fischer T. (eds), *Information Systems and Neuroscience* (pp. 287-293). Springer.

Conrad, C., & Bailey, L. (2020). What can NeuroIS learn from the replication crisis in psychological science? In Davis F. D., Riedl R., vom Brocke J., Léger P. M., Randolph A., Fischer T. (eds), *Information Systems and Neuroscience* (pp. 129-135). Springer.

Conrad, C., Aziz, J., <u>Smith, N.</u> and Newman, A. (2020). What do users feel? Towards affective EEG correlates of cybersecurity notifications. In *NeuroIS Retreat* (pp. 153-162). Springer.

Conrad, C. and Newman, A. (2019). How attention networks can inform research in information systems. In Davis, F. D., Riedl, R., vom Brocke, J., Léger, P. M., and Randolph A. B. (eds.), *Information Systems and Neuroscience* (pp. 155-162). Springer.

Conrad, C. and Newman, A. (2019). Measuring the impact of mind wandering in real time using an auditory evoked potential. In Davis, F. D., Riedl, R., vom Brocke, J., Léger, P. M., and Randolph A. B. (eds.), *Information Systems and Neuroscience* (pp. 37-45). Springer.

Jankowska, M, Conrad, C., Harris, J. & Keselj, V. (2018). N-gram based approach for automatic prediction of essay rubric marks. In *Advances in Artificial Intelligence: 31st Canadian Conference on Artificial Intelligence, Canadian AI*. Springer.

Conrad, C., Ali, N., Gao, Q. & Keselj, V, (2016). ELM: an extended matching method on record linkage analysis of disparate databases for profile data mining. In *Proceedings of the 18<sup>th</sup> IEEE Conference on Business Informatics*. IEEE.

Conrad, C., & Keselj, V. (2016). Predicting political donations using twitter hashtags and character n-grams. *Proceedings of the 18<sup>th</sup> IEEE Conference on Business Informatics*. IEEE.

Conrad, C., & Bliemel, M. (2016). Psychophysiological measures of cognitive absorption and cognitive load in e-learning applications. In *Proceedings of the 2016 International Conference on Information Systems*.

# Abstracts, Posters, Workshops, or Non-Archived Papers Presented at Conferences

Conrad, C. (forthcoming). Measures and impacts of mind wandering when using online learning software. 2022 Meeting of the Canadian Society of Brain and Behaviour and Cognitive Science, July 2022.

Mongeon, P., Taylor, S. and Conrad, C. (2022). On achieving greater research impact through interdisciplinary collaboration in Canada. 2022 Meeting of the Administrative Sciences Association of Canada, June 2022.

Conrad, C. and Newman, A. (2019). An ERP approach to measuring mind wandering during learning multimedia use. Poster presented at the Annual Meeting of the Society for Neuroscience, October 2019.

Conrad, C., Ali-Hassan, H. and Bliemel, M. (2015). Hadoop Hands On: Teaching MapReduce to business students through analogy. Abstract presented at the 2015 Americas Conference on Information Systems Big Data and Analytics EdCon, August 2015.

# **Invited Talks and Other Non-refereed Knowledge Mobilization**

Conrad, C. (2022). How to approach the academic job market. 2022 Administrative Sciences Association of Canada (ASAC) Conference. Dalhousie University.

Conrad, C. (2021). How could mind wandering impact home office users of business information systems? SAP North America Academic Community Conference 2021. Virtual session.

Conrad, C. (2021). Can social data be used for prospecting? Past evidence, and why we need an open research programme. Invited talk presented at the *2021 Nonprofit AI Forum*. Acadia University.

Moylan, R. and Conrad, C. (2021). How to foster creativity and better learning experiences from group work. *Dalhousie Centre for Learning and Teaching Workshop Series*. Pedagogical workshop session. Dalhousie University.

Conrad, C. (2021). Panel Discussions: ERPsim for Research. Invited talk at the 2021 ERPsim User Group Meeting. Invited talk. HEC Montréal.

Conrad, C. (2019). The Psychophysiology of Mind Wandering During Online Lectures. 2019 Graham Goddard Inhouse Conference. Presentation. Dalhousie University.

Hornell-Kennedy, B., Murphy, P., Stelmack, S., and Conrad, C. (2018). *Retail apocalypse: The case of Sears Canada Inc.* Case study. Dalhousie University.

Conrad, C. Measuring mind wandering during human-computer interactions (2018). 2018 Dalhousie Computer Science Inhouse Conference. Presentation. Dalhousie University

Charlebois, S., Harris, J., Tyedmers P., Bailey, M., Keselj, V., Conrad C., Grant G., Somogyi, S., Chamberlain, S. (2017). *Canada's Food Price Report 2017*. Report. Dalhousie University.

Conrad, C. Psychophysiological measures of cognitive absorption and cognitive load in elearning applications (2016). 2016 Dalhousie Computer Science Inhouse Conference. Presentation. Dalhousie University.

### **TEACHING**

DGIN 5001 – Capstone in Digital Innovation. Taught 1 unit.

DGIN 5201 - Digital Transformation. Taught 2 units.

INFO 6513 - Business Analytics and Data Visualization. Taught 2 units.

INFO 6270 - Introduction to Data Science. Taught 2 units.

INFO 5590 - Information Management Systems. Taught 4 units.

MGMT 2605 - Working with Data. Taught 2 units.

COMM 3511 - Management Information Systems. Taught 4 units.

ECMM 6020 - Business Issues in Electronic Commerce. Taught 1 unit.

ECMM 6000 - Overview of Electronic Commerce. Taught 3 units.

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## STUDENT MENTORSHIP

# **Current supervision or co-supervision**

Harsh Gawai. Topic: Risky use behaviour clustering from stock trading app data. Master of Computer Science thesis. Co-supervised with Dr. Vlado Keselj.

Robert Ogilvie. Topic: Emotional intelligence development in in technology-assisted remote teams. Master of Science Business thesis.

Jenna Beresford. Topic: A brain-computer interface for measuring mind wandering in the workplace. Master of Information thesis.

Juan Chaves Baquero. Topic: A technique for summarizing and enhancing readability of websites' terms of use agreements. Master of Digital Innovation thesis.

Juliana Christiani. Topic: Detecting mind wandering when attending online meetings. Bachelor of Science Honors Neuroscience thesis.

## Thesis supervision

Jonathon Henneberry (2022). Identifying Affective ERP Correlates of Cybersecurity Threats and Notifications. Bachelor of Science Honors Psychology thesis.

Simon Leger (2022). The science of YouTube: The role of enjoyment and mind wandering. Bachelor of Science Honors Neuroscience thesis. Co-supervised with Dr. Aaron Newman.

Tess Konwisarz (2022). Investigating the impact of lecture length on mind wandering and learning outcomes for pre-recorded lectures. Bachelor of Science Honors Neuroscience thesis.

Rachel Moylan (2021). Presence, agency, and context: Students' experiences engaging in creative group processes in an online educational environment. Master of Information thesis. Cosupervised with Dr. Sandra Toze.

## **Graduate Research Projects and Capstone Research Papers**

Abhijeet Singh (2021). Sentiment analysis of the comments of Tinder and Bumble subreddits. Master of Electronic Commerce research paper.

Ankit Bajaj (2021). How to reduce cognitive overload in e-learning with human centered design. Master of Electronic Commerce research paper.

Ashike Mahmud (2021). An investigation of e-commerce cart recovery emails during Covid-19. Master of Electronic Commerce research project.

Mark Vokey (2021). How do social media companies become successful in Halifax? Master of Electronic Commerce research paper.

Shakuntala Khatri (2021). On the application of business intelligence analytics in small-scale businesses. Master of Electronic Commerce research paper.

Shreyas Bhaktavatsala (2021). Impacts of Covid-19 on Canadian retail and omnichannel ecommerce adoption. Master of Electronic Commerce research paper.

Urvashikumari Patel (2021). A study of factors affecting the perceptibility of musicians in the music industry. Master of Electronic Commerce research paper.

Aditya Ayri (2020). Implications of using RPA and smart contracts in financial organizations. Master of Electronic Commerce research paper.

Carlos Calix Woc (2020). Psychographic profiling of charitable donations using Twitter data and machine learning techniques. Master of Electronic Commerce research project.

Gabriel Orellana Diaz (2020). Alternative dating app business model proposed based on investigations in social interactions. Master of Electronic Commerce research project.

Hardik Raval (2020). Using cloud computing to augment the learning process in higher learning institutions. Master of Electronic Commerce research paper.

Suchindra Karthik (2020). Personalization in the e-commerce industry. Master of Electronic Commerce research paper.

Saurabh Minotra (2020). Recommendation systems are getting smarter because of state-of-the-art technology. Master of Electronic Comerce research paper.

Yanzhe Zhang (2020). Video games and loot boxes. Master of Electronic Commerce research paper.

Roberto Abarca (2018). Online banking in Ecuador: Challenges and opportunities. Master of Electronic Commerce research paper.

# **Directed Reading Courses**

Razia Choudhury (2022). What do information managers need to know about cloud data analytics? Master of Information directed reading.

Razia Choudhury (2021). Twitter sentiment analysis & customer classification model for digital marketing. Master of Information directed reading.

Dinesh Mulchandani (2020). Offline classifier for tri-hybrid gaming paradigm based on P300, N170 and SSVEP signals. Master of Computer Science directed reading. Co-supervised with Aaron Newman.

Natalie Smith (2020). Identifying brain correlates of cybersecurity threat notifications. Bachelor of Science Neuroscience supervised project. Co-supervised with Aaron Newman.

Pallavi Gone (2020). Are there differences between Canada and US residents in sentiment in tweets related to Covid-19? Master of Information directed reading.

Ravishankar Subramanilyer (2020). A novel tri-hybrid brain-computer interface paradigm. Master of Computer Science directed reading. Co-supervised with Aaron Newman.

# Supervision of research assistants on projects not related to degree requirements

Anika Nissen (2022). Are you human? Detecting the difference in trust evaluations between virtual and human influencers.

Kiera O'Neil (2022). What is the role of mind wandering in work productivity when using remote workplace platforms?

Francesco Usai (2022). What is the role of mind wandering in work productivity when using remote workplace platforms?

Kydra Mayhew (2022). What is the role of mind wandering in work productivity when using remote workplace platforms?

Rachel Moylan (2021). What factors lead to gainful university online community experiences during COVID-19?

Gabriel O. Diaz (2021). What factors lead to gainful university online community experiences during COVID-19?

### Other mentorship activities

- 2026 Poppy Riddle (PhD Interdisciplinary Studies, thesis committee)
- 2024 Pallavi Gone (PhD Interdisciplinary Studies, thesis committee)
- 2022 Poppy Riddle (MI Thesis reader).
- Hita Swamy (MEC thesis reader), Pallavi Gone (MI thesis reader), Soheil Latifi (MCS thesis reader), Stacey Taylor (PhD research aptitude examiner)
- 2020 Patrick Crysdale (MEC thesis reader), Kaustubh Dhotre (MEC project reader), Varsha Hemrajani (MEC thesis reader)
- 2019 Asad Kahn (MEC thesis reader)

### ACADEMIC AND PROFESSIONAL SERVICE

# **Committees for the Academic Community**

- 2019 NeuroIS Retreat Program Committee
  - 2022 Big Data, Data Analytics and Business Intelligence Track Co-Chair, Association for Information Systems Conf-IRM
  - 2022 Reviewer, NSERC Alliance Grant Program (1)

# **Journal and Conference Proceedings Reviews**

- Administrative Sciences Association of Canada Conference (2); British Journal of Educational Technology (1); Hawaiian International Conference on Systems Science (1); NeuroIS Retreat (2); Pacific Asia Conference on Information Systems (2)
- Journal of Visualized Experiments (1); Internet Research (1); Canadian AI (1); International Conference on Information Systems (2); International Conference on Knowledge Management (2); NeuroIS Retreat (1)
- Americas Conference on Information Systems (1); International Conference on Information Systems (1); Information Technology & People (1); Journal of the Association for Information Systems (1); NeuroIS Retreat (3)
- 2019 Journal of Visualized Experiments (1); European Conference on Information Systems (1); NeuroIS Retreat (2)
- 2018 Canadian Council for Small Business and Entrepreneurship (1); ACM Symposium on Document Engineering (2)
- 2017 Americas Conference on Information Systems (1)

## **Service at Dalhousie University**

- 2021 Faculty of Management DFA Funding Allocations Committee
- 2021 Faculty of Graduate Studies Doctoral Scholarship Review Committee
- 2020 School of Information Management Appointments, Hiring, Promotion and Tenure Committee
- 2019 University Senate E-Learning Advisory Committee
- 2019 Interdisciplinary PhD Admissions Committee

2019 -	Faculty of Management Research Advisory Committee
2021	Faculty of Management Restructuring Committee
2020 - 2021	Faculty of Computer Science and Faculty of Management undergraduate foundation year program design committee.
2020	Faculty of Computer Science Hiring Committee
2020	Faculty of Management COVID-19 Student Experience Special Project Team
2020	Technical Program Administrator, 2020 Nova Scotia Open Data Contest
2019 - 2020	Senate Convocation Design Working Group
2019 - 2020	School of Information Management Curriculum Committee
2015 - 2018	Mentor, Norman Newman Centre for Entrepreneurship
2017 - 2018	Treasurer, IDPhD Student Society, Dalhousie University
2017	Instructor and Hackathon Coordinator, Shiftkey Labs Django Hackathon and Summer Internship Program
2016	Conference Co-Chair, Dalhousie Computer Science Inhouse Conference (DCSI)
2016	Recruitment Initiative Coordinator, Master of Electronic Commerce Program
2015	Faculty of Computer Science Dean Search Committee
Professional and Community Service	
2021 -	Board of Directors, AIR Resilience Inc. (mental resilience company)
2016 -	Advisory Board, Centre for Public Dialogue (Indigenous reconciliation, refugee, and climate advocacy group)
2020 - 2022	Technical Advisor, Board HealthScore (board governance startup)
2014 - 2019	Member, Global Shapers Community (World Economic Forum)
2018	Project Co-Chair, Nova Scotia International Entrepreneurship Competition
2017	Project Co-Chair Immigrant Women Entrepreneur Showcase

- 2012-2014 Advisor, Junior Achievement Company Program
- 2008 2010 Vice President, Dalhousie Undergraduate Philosophy Society
- 2006 2008 Member, Sodales Debate Society (CUSID)

## IN THE MEDIA

- 2022 No. 1 Young Academics Feature: Colin Conrad, School of Information Management Dalhousie University (Canada). *NeuroIS Society Magazine*.
- 12-02-2021 Power to the pupils: Management professor crafts online lessons that suit students and their busy lives. *Dal News*.
- 3-12-2019 Technology can change everything about the business of higher ed (for the better). *Dalhousie Business Review*.
- 6-12-2018 Breaking down the divide between academics and the public at large. *CBC Information Morning*.
- 2014 Spring Meet the Future: Innovate UI, Colin Conrad & Farrukh Momin. *Dal CS Magazine*.

## OTHER TRAINING AND PROFESSIONAL DEVELOPMENT

- 2022 ReThinking Gender: Trans inclusive spaces and practices by Equity Educate (online course)
- 2021 AMCIS Junior Faculty Consortium
- 2018 Dalhousie University Interdisciplinary PhD Public Scholars Training Program
- 2017 NeuroIS Retreat Training Course
- 2016 ERPsim Certified Instructor (Level 1)
- 2016 Propel ICT Launch Startup Accelerator Program
- 2016 SAP HANA Native Application Development Workshop (SAP University Alliances)
- 2015 Data Mining with R Workshop
- 2014 Launch Dal Summer Startup Accelerator

## PROFESSIONAL MEMBERSHIPS

Association for Information Systems (AIS)

AIS Special Interest Group in Human-Computer interaction (SIGHCI)

Administrative Sciences Association of Canada (ASAC)

Canadian Society for Brain, Behaviour and Cognitive Science (CSBBCS)

NeuroIS Society

# TECHNICAL AND OTHER RELATED SKILLS

EEG Systems (Brain Products actiCHamp, EGI Geodesic Sensor Net)

Python (Django, Jupyter, MNE, NLTK, NumPy, Pandas, PsychoPy, Scikit-Learn)

R (Jupyter, RStudio)

JavaScript (D3, JQuery)

SAP technologies (Business Objects, Fiori, HANA, Lumira, OpenUI, Predictive Analytics)