

# Lillio Mok

🌐 [www.cs.toronto.edu/~lillio](http://www.cs.toronto.edu/~lillio) – ✉ [lillio@cs.toronto.edu](mailto:lillio@cs.toronto.edu)

CS PhD candidate with a record leading and publishing data-driven research on platform and AI safety. **4 years** in industry R&D and SWE roles; **6 years** working full-stack with multi-TB datasets and pipelines.

**Areas:** behavioral data science, human-AI interaction, computational social science.

**Methods:** trace and user modeling (TBs of data), applied ML and NLP (e.g. embeddings), generative AI (e.g. LLM in-context learning), A/B experiment design, causal inference, survey science, user studies.

## EDUCATION

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**PhD Computer Science, University of Toronto** 2018-24 Q2 (expected)

Thesis: Measuring the Digital Welfare of Online Social Systems

Advisor: Ashton Anderson

**MSc Computer Science, Oxford University** 2017-18

Thesis: Building Decentralized Social Software for Centralized Social Networks

Advisors: Max Van Kleek, Reuben Binns

**BSc Computer Science, Physics, Philosophy, McGill University** 2011-16

## AWARDS

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- Schwartz Reisman Institute for Technology and Society Graduate Fellowship, 2020-22 (×2)
- Wolfond Fellowship, 2021-22
- University of Toronto Fellowship, 2018-22 (×4)
- Queen Elizabeth II Graduate Scholarship, 2019
- Ontario Graduate Scholarship, 2019 (declined)
- University of British Columbia President's Entrance Award, 2011 (declined)

## RESEARCH EMPLOYMENT

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**Microsoft** 2022  
*Office of Applied Research, Redmond, USA* *Research Intern*

Delivered organizational recommendations by modeling millions of meetings and employee surveys [4].

**Spotify** 2020  
*Tech Research, New York, USA* *Research Contractor*

Reconciled competing theories of diverse consumption by profiling billions of listening events [5].

**Samsung** 2019-20  
*AI Center, Toronto, Canada* *Research Intern*

Developed Samsung's first TB-scale user model for one of their most popular smart products worldwide.

**University of Toronto** 2018-  
*Computational Social Science Lab, Toronto, Canada* *Researcher*

Leading multi-methods research on well-being, news consumption, and human-AI interaction [1-7, 9-13].

**McGill University** 2014-15  
*Distributed Digital Music Archives Lab, Montreal, Canada* *Research Assistant*

Built a musicology database; designed and published a similarity detector for symbolic music [8].

## ENGINEERING EMPLOYMENT

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**Autodesk** 2016-17  
*Cloud Platforms, San Francisco, USA* *Software Engineer*

Founding contributor to Autodesk's next-gen cloud platform for multi-tenant, Dockerized services; reduced costs e.g. by 57% for the group's billion-event streaming service and achieved SOC2 certification in a year.

**Autodesk** 2015  
*Cloud Platforms, Montreal, Canada* *Software Development Intern*

Developed tools for containerized service monitoring, automated scaling, stress testing, CI/CD pipelines.

## PUBLICATIONS (PEER-REVIEWED)

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### Journal Articles

- [1] [L. Mok](#), S. Nanda, and A. Anderson, “People Perceive Algorithmic Assessments as Less Fair and Trustworthy Than Identical Human Assessments,” *PACM on Human-Computer Interaction*, no. **CSCW**, 2023
- [2] [L. Mok](#) and A. Anderson, “The Complementary Nature of Perceived and Actual Time Spent Online in Measuring Digital Well-being,” *PACM on Human-Computer Interaction*, no. **CSCW**, 2021

### Conference Proceedings

- [3] [L. Mok](#), M. Inzlicht, and A. Anderson, “Echo Tunnels: Polarized News Sharing Online Runs Narrow but Deep,” in *International AAAI Conference on Web and Social Media*. **AAAI ICWSM**, 2023
- [4] [L. Mok](#), L. Sun, S. Sen, and B. Sarrafzadeh, “Challenging but Connective: Large-Scale Characteristics of Synchronous Collaboration Across Time Zones,” in *CHI Conference on Human Factors in Computing Systems*. **CHI ACM**, 2023
- [5] [L. Mok](#), S. F. Way, L. Maystre, and A. Anderson, “The Dynamics of Exploration on Spotify,” in *International AAAI Conference on Web and Social Media*. **AAAI ICWSM**, 2022
- [6] G. Chen and [L. Mok](#), “Characterizing Growth and Decline in Online UX Communities,” in *Extended Abstracts of the CHI Conference on Human Factors in Computing Systems*. **CHI EA ACM**, 2021
- [7] [L. Mok](#), B. Li, S. Gou, and J. J. Williams, “Understanding and Correcting Inaccurate Calorie Estimations on Amazon Mechanical Turk,” in *Extended Abstracts of the CHI Conference on Human Factors in Computing Systems*. **CHI EA ACM**, 2019
- [8] L. Risk, [L. Mok](#), A. Hankinson, and J. Cumming, “Melodic Similarity in Traditional French-Canadian Instrumental Dance Tunes,” in *International Society for Music Information Retrieval*. **ISMIR**, 2015

### Non-Archival Venues

- [9] 3× Oral Presentations, *International Conference for Computational Social Science (IC2S2 2020, 22, 23)*
- [10] 4× Poster Presentations, *International Conference for Computational Social Science (IC2S2 2022, 23)*

### Working Papers

- [11] (**WIP**) [L. Mok](#), M. Inzlicht, and A. Anderson, “Political Figures are More Polarized in Social Media Discourse than in Traditional Media,” ETA 2024
- [12] (**Under Review @ CSCW**) L. Sun, [L. Mok](#), S. Sen, and B. Sarrafzadeh, “Rhythm of Work: Mixed-methods Characterization of Information Workers Scheduling Preferences and Practices,” ETA 2024
- [13] (**Under Review @ FAccT**) J. Bo\*, [L. Mok\\*](#), J. Tie, and A. Anderson, “Does GPT Distrust Algorithms? Evaluating Large Language Models for Algorithm Aversion,” ETA 2024 — *\*equal contribution*.

### Media Coverage

“Spotify is trying to figure out how our music preferences change as we age.” Popular Science, 2022

## MISCELLANEOUS

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### Service

Reviewer for: CHI (outstanding review recognition), CSCW, AAAI ICWSM, WWW/WebConf.

Teaching: Computational Social Science, Social and Information Networks, Computers and Society.

Mentorship: 7× research students with 3 published/WIP papers [1, 6, 13]; 2× SWE interns at Autodesk.

### Technical Skills

Languages: Python, SQL, Java, Scala, JavaScript, Groovy.

Data: (*Analysis*) Spark (DataBricks), BigQuery (GCP), sklearn, statsmodels, gensim, NLTK, spaCy, Spark NLP, huggingface, LangChain; (*Viz*) Tableau, Plotly, Seaborn; (*Surveys*) Qualtrics, Forms, MTurk.

Systems: AWS, Docker, Apache Mesos/Marathon, Jenkins, Terraform, Vault, Git, LAMP stack.

References: Available on request.