

Boris Babic

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last update: August 2024

Academic Appointments

Tenure Stream Associate Professor and HKU100 Scholar, **University of Hong Kong** 2023-

Institute of Data Science
Department of Philosophy
Faculty of Law (by courtesy)

I am also a Principal Investigator of the AI & Humanity Lab and a faculty member/affiliate of the Urban Systems Institute, the Programme on Artificial Intelligence and the Law, and the Centre for Interdisciplinary Legal Studies, all at HKU.

Additionally, I will remain Associate Professor (status only) at the University of Toronto, and a faculty affiliate of the Schwartz Reisman Institute for Technology and Society, also at the University of Toronto.

Tenure Stream Assistant Professor, **University of Toronto** 2021-2024

Department of Statistical Sciences
Department of Philosophy
Faculty of Law (by courtesy)
Faculty Fellow, Schwartz Reisman Institute for Technology and Society

NOTE: For 2023-2024, I took a leave of absence and joined the University of Hong Kong, where I have remained since.

Tenure Stream Assistant Professor, **INSEAD** 2019-2021

Department of Decision Sciences (France and Singapore)

Postdoctoral Scholar, **California Institute of Technology (Caltech)** 2017-2019

Education

PhD in Philosophy, University of Michigan, Ann Arbor 2013-2017

Dissertation Title: Foundations of Epistemic Risk

Committee:

James Joyce (Chair), Peter Railton,
Brian Weatherson, Rich Gonzalez (Statistics/ Psychology)

MS in Statistics, University of Michigan, Ann Arbor 2015-2017

JD, *cum laude*, Harvard Law School 2007-2010

BA, *summa cum laude*, York University 2003-2007

Grants/Fund Raising

I have raised over **\$430,000 CAD / \$2.5 million HKD** in research funding in the last three years from:

- Research Grants Council, Government of Hong Kong
- Social Sciences and Humanities Research Council of Canada,
- Schwartz Reisman Institute for Technology and Society,
- Connaught Labs Fund,
- Transform Heart Failure, and
- the Ted Rogers Center for Heart Research.

Further details are provided below.

Areas of Specialization and Competence

AOS: Law, Policy, and Ethics of AI and Machine Learning; Bayesian Statistics

AOC: Decision & Game Theory, Legal Theory

Publications

Academic Journal Articles.....

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|---|----------|
| 1. Resolute and Correlated Bayesians, Philosophers' Imprint
with Anil Gaba, Ilia Tsetlin, and Robert L. Winkler | Exp 2024 |
| 2. On the Epistemic Significance of Noise, Oxford Studies in Epistemology
with Zoe Johnson King | Exp 2024 |
| 3. The Algorithmic Explainability Bait and Switch, Minnesota Law Review
with I. Glenn Cohen | 2023 |
| 4. Moral Encroachment Under Moral Uncertainty, Philosophers' Imprint
with Zoë Johnson King | 2023 |
| 5. How AI Can Learn from the Law, Nature Digital Medicine
with I. Glenn Cohen, Sara Gerke, Theodoros Evgeniou, Klaus Wertenbroch
and Qiong Xia | 2023 |
| 6. Algorithmic Fairness and Resentment, Philosophical Studies
with Zoe Johnson King | 2023 |
| 7. Comment on Ariel Dora Stern, "Regulation of Medical AI",
The Economics of Artificial Intelligence
edited by Ajay Agrawal, Joshua Gans, and Avi Goldfarb | 2023 |
| 8. Beware Explanations from AI in Health Care, Science
with I. Glenn Cohen, Theodoros Evgeniou, and Sara Gerke | 2021 |
| 9. Direct Advertising of Medical Machine Learning, Nature Machine Intelligence
with I. Glenn Cohen, Theodoros Evgeniou, and Sara Gerke | 2021 |
| 10. Normativity, Epistemic Rationality and Noisy Statistical Evidence,
British Journal for the Philosophy of Science | 2021 |

with Anil Gaba, Ilia Tsetlin, and Robert L. Winkler

11. Approximate Coherentism and Luck, **Philosophy of Science** 2021
12. A System View for Medical Machine Learning Policy, **Nature Digital Medicine** 2020
with I. Glenn Cohen, Theodoros Evgeniou, and Sara Gerke
13. Moral Obligation & Epistemic Risk, **Oxford Studies in Normative Ethics** 2020
with Zoë Johnson-King
14. Algorithms on Regulatory Lockdown, **Science** 2019
with I. Glenn Cohen, Theodoros Evgeniou, and Sara Gerke
15. A Theory of Epistemic Risk, **Philosophy of Science** 2019

Other Writing.....

16. Explaining Medical AI is Easier Said than Done, **STAT News** 2021
with Sara Gerke
17. When Machine Learning Goes off the Rails, **Harvard Business Review** 2020
with I. Glenn Cohen, Theodoros Evgeniou, and Sara Gerke
18. Can AI Decide Who Gets an Organ Transplant?, **Harvard Business Review** 2020
with I. Glenn Cohen, Theodoros Evgeniou, Sara Gerke, and Nikos Trichakis
19. Onboarding AI, **Harvard Business Review** 2020
with Daniel Chen, Theodoros Evgeniou, and Anne-Laure Fayard

In Progress.....

20. Justifiable AI:
How to Seek Assurance for Large Language Models (in progress)
with Julian Savulescu and I. Glenn Cohen
21. Managing Failure:
How Should We Govern Problems from Medical AI/ML Devices? (in progress)
with Ariel Dora Stern and I. Glenn Cohen

Presentations

“Justifiable AI: How to Seek Assurance for Large Language Models”

Centre for the Study of Bioethics/Hastings/Oxford Uehiro Joint Conference (May 2024)
IVR 2024, Seoul (July 2024)
HKU Law and Philosophy of AI Workshop (July 2024)

“How Not to Open up the AI Black Box”

HKU Urban Systems Institute (March 2024)
Wharton School of Business (December 2023)
HKU Faculty of Law (June 2023)

“The Cost of Data Bias”

IMS International Conference on Statistics and Data Science, Lisbon (December 2023)

“Managing Failure: How Should We Govern Problems from Medical AI/ML Devices?”

NUS Faculty of Medicine (September 2023)

“The Algorithmic Explainability Bait and Switch”

HKU Faculty of Law (June 2023)

HKU Institute for Data Science (June 2023)

NUS Faculty of Medicine (June 2023)

“Bayesian Bandits and New Hypotheses”

NYU-Rutgers Workshop on the Foundations of Probability (January 2023)

“The Case Against Explainable Medical Machine Learning”

Canadian Statistical Society, Annual Meeting (June 2021)

University of Toronto, Schwartz Reisman Institute (September 2021)

Frankfurt School of Finance and Management (June 2022)

University of Toronto, Rotman School of Management (October 2022)

“Resolute and Correlated Bayesians”

California Institute of Technology (June 2021)

University of Bristol (May 2021)

UC Irvine, Formal Epistemology Workshop (May 2022)

“Noisy Stereotypes”

UC Irvine, Formal Epistemology Workshop (April 2020)

University of Toronto (February 2020)

University of Washington (February 2020)

University of Stirling and Edinburgh, Varieties of Risk Project (November 2021)

“Algorithmic Discrimination and Epistemic Risk”

London School of Economics (February 2019)

INSEAD (February 2019)

California Institute of Technology (January 2019)

King’s College London (July 2021)

“Moral Obligation and Epistemic Risk”

Arizona Workshop in Normative Ethics (January 2019)

“A Challenge for Approximate Coherentism”

University of Colorado, Boulder, 34th Conf. on Chance and Probability (October 2018)

“Testing for Discrimination and the Risk of Error”

The Australian National University (July 2018)

“Dynamic Epistemic Risk”

University of California, Irvine (February 2018)

California Institute of Technology (January 2018)

“Generalized Entropy and Epistemic Risk”

University of Michigan, Philosophy of Science Colloquium (February 2018)
 London School of Economics, Philosophy of Probability Conference (June 2017)
 University of Chicago, Graduate Conference (April 2016)

“Frequency Encoding Credences”

London School of Economics, Decisions, Games and Logic Workshop (June 2015)

“Degrees of Belief, Moral Judgment, and Legal Responsibility”

Harvard Legal Philosophy Colloquium (November 2014)

Grants (Selected)

The Legal and Ethical Foundations of Generative Models (PI, 478,230 HKD) General Research Fund (GRF), Hong Kong Research Grants Council (RGC)	2024-2027
Regulating the AI Lifecycle: A Multidisciplinary Perspective (Co PI, \$120,000) XSeed Grant, DOSS, ECE, Transform HF/Ted Rogers Centre for Heart Research	2023-2025
Summer Research Fellowship (\$5,250) University of Toronto Excellence Award	2023
From Outcome Disparity to Data Inequality, Insight Grant (Sole PI, \$76,500) Social Sciences and Humanities Research Council of Canada	2021-2025
Faculty Fellowship (\$25,000) Schwartz Reisman Institute	2021-2025
Faculty Fellowship (\$25,000) Connaught New Faculty Research Prize	2021-2025
Reconceiving Procedural Fairness, Insight Dlpt Grant (Collaborator, \$64,584) Social Sciences and Humanities Research Council of Canada	2021-2025
Institutional Grant (Sole PI, \$2,500) Social Sciences and Humanities Research Council of Canada	2021-2022
Fair Machine Learning, Research Grant (\$7,500) The Desmarais Fund for Research in AI	2020
Doctoral Fellowship (\$60,000) Social Sciences and Humanities Research Council of Canada	2015-2018

Teaching

Ethical Issues in Big Data (new course) (PhD) <i>University of Hong Kong, Institute of Data Science</i>	Fall 2024
Foundations of AI, Data and Algorithms (new course) (MA) <i>University of Hong Kong, Department of Philosophy</i>	Fall 2023, Fall 2024
Formal Methods for AI, Ethics and Society (new course) (MA) <i>University of Hong Kong, Department of Philosophy</i>	Spring 2024, Spring 2025
Law and Ethics of Artificial Intelligence (new course) (LLB) <i>University of Hong Kong, Faculty of Law</i>	Spring 2024, Spring 2025
Bayesian Statistics (BA) <i>University of Toronto</i>	Spring 2023, Spring 2022

Philosophy of Science (PhD) <i>University of Toronto</i>	Spring 2022
Statistics, Ethics and Law (new course) (MSc) <i>University of Toronto</i>	Fall 2021
Ethical Issues in Big Data (new course) (BA) <i>University of Toronto</i>	Spring 2023, Fall 2021
Bayesian Statistics (PhD) <i>INSEAD</i>	Fall 2020, Fall 2019
Management Decision Making (MBA) <i>INSEAD</i>	Spring 2021, Spring 2020
Data Analysis (Masters in Management) <i>INSEAD</i>	Fall 2020
Quantitative Methods (MBA) <i>INSEAD</i>	Summer 2019, Fall 2019, Fall 2020
Statistics, Ethics and Law (new course) <i>Caltech</i>	Spring 2018
Probability, Evidence and Belief <i>Caltech</i>	Spring 2018, Fall 2018
Knowledge and Reality <i>Caltech</i>	Fall 2017, Spring 2019
Nature of Science <i>University of Michigan</i>	Fall 2016
Knowledge and Reality <i>University of Michigan</i>	Summer 2016

Professional Service

Service at the University of Hong Kong.....

Developing new Double BA Program in Computer Science and Humanities <i>Core Committee Member</i>	2024-
Developing new Executive Education Program on Responsible AI in Business <i>Core Committee Member</i>	2024-
Branding and Marketing Committee at the Institute of Data Science <i>Core Committee Member</i>	2024-
Developing Hong Kong Ethics Lab and new MAPPE Program <i>General Committee Member</i>	2024-

Editorial Positions.....

Senior Associate Editor, ACM Transactions on Probabilistic Machine Learning TOPML is a newly established ACM journal on Bayesian machine learning, edited by Fang Liu, Theodoros Papamarkou and Wray Buntine.	2023-
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Other Service

Reviewer for the following publications:

Philosophy of Science, Mind, BJPS, Theory & Decision, PPR, Ergo, Synthese, PPQ, APQ

Philosophical Studies, Nature Digital Medicine, OUP, Philosophy & Technology

Journal of Law and the Biosciences

7th Conference on Bayesian, Frequentist and Fiducial Inference (BFF7) June 2022
Session Organizer

ACM Conference on Fairness, Accountability and Transparency (ACM FAccT) June 2022
Program Committee

AAAI/ACM Conference on AI, Ethics and Society May 2021
Program Committee

Philosopher's Annual 2017, 2016
Editor (Volumes 35 and 36)

Harvard Journal of Law and Technology 2007-2009
Editor

Legal Experience

Stikeman Elliott, LLP Toronto
Litigation Attorney 2012-2013

Quinn, Emanuel, Urquhart & Sullivan, LLP Los Angeles
Litigation Attorney 2010-2012

Kirkland & Ellis, LLP New York
Summer Associate (offer extended) Summer 2009

Petrie-Flom Center for Health Law Policy, Biotechnology & Bioethics Cambridge, MA
Research Assistant 2009-2010

Computer Skills

R, Python, SAS, JAGS, Stan

Memberships & Affiliations

State Bar of California, Provincial Bar of Ontario

US District Court for the Northern District of California

References

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Jonathan Weisberg

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Elizabeth Anderson

(Teaching Referee)
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