

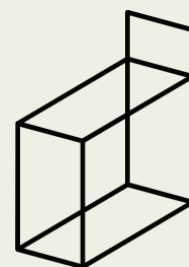
AVANÇOS DA COMPUTAÇÃO E INTELIGÊNCIA ARTIFICIAL

Reflexões sobre o Design de Tecnologias com IA para Uso Científico



Clarisse Sieckenius de Souza

www.inf.puc-rio.br/~clarisse



DEPARTAMENTO
DE INFORMÁTICA
PUC·RIO



MEU PERFIL

- ★ Formação em Letras e Linguística
(Graduação, Mestrado e Doutorado, PUC-Rio)
- ★ Professora Titular Emérita
Departamento de Informática, PUC-Rio
- ★ Inteligência Artificial, Linguística Computacional (1987 a 1991)
- ★ Interação Humano-Computador e Semiótica Computacional
(1992-2016)
- ★ Retórica Digital, Filosofia da Tecnologia e Inteligência Artificial
(2017-hoje)





INTERAÇÕES COM COMPUTADORES PESSOAIS

REPRESENTAÇÕES DE 1990 A 2010: USUÁRIOS TRATAM SEUS COMPUTADORES COMO AGENTES SOCIÁVEIS (REEVES & NASS, 1996)

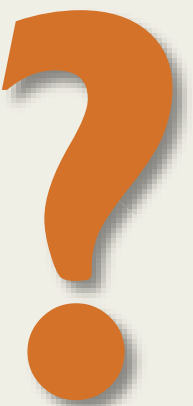


SOFTWARE: UM ARTEFATO INTELECTUAL COLETIVO





Qual a “mensagem” comunicada por um software com IA destinado apoiar a geração de conhecimento científico?

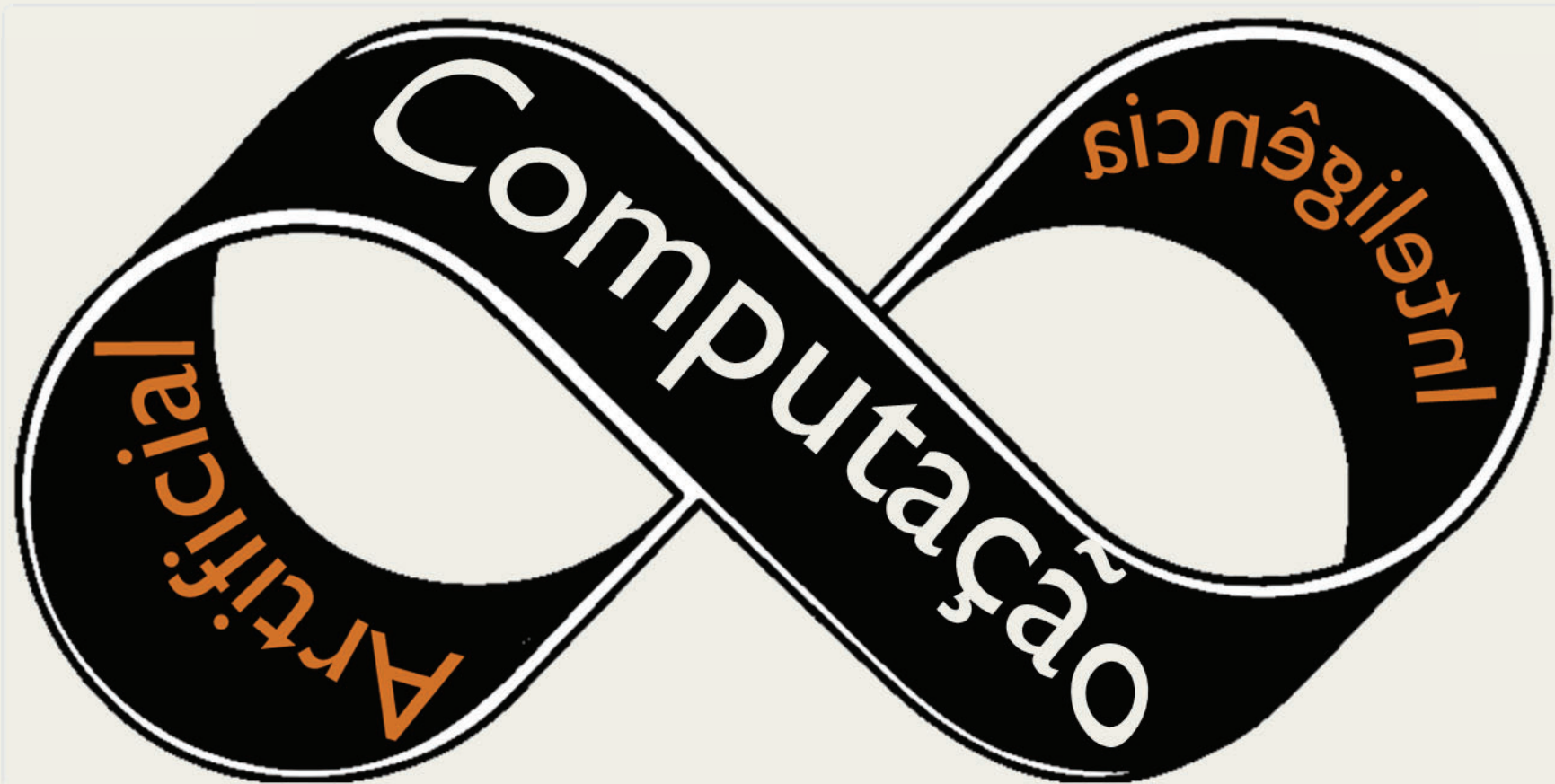


MEUS PONTOS DE PARTIDA PARA NOSSA DISCUSSÃO



- Diante dos desafios que temos como sociedade, a **interdisciplinaridade** é fundamental.
- A **pluralidade e diversidade** na ciência são uma conquista civilizatória, pela qual nos cabe zelar.
- A IA oferece **inéditas oportunidades** para descobertas científicas, ao mesmo tempo em que **poderá beneficiar-se continuamente** destas mesmas descobertas para aprimorar-se.

AVANÇOS DA COMPUTAÇÃO E IA



Computação e IA se alimentam reciprocamente.

CONTEXTO I



AVANÇOS DA COMPUTAÇÃO E IA

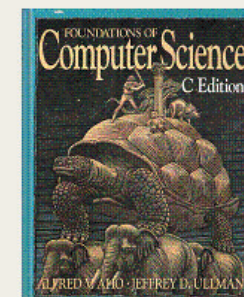


Aho, Alfred V., and Jeffrey D. Ullman. *Foundations of Computer Science*. USA: Computer Science Press, Inc., 1992.

Though it is a new field, computer science already touches virtually of human endeavor.

Its impact on society is seen in the proliferation of computers, information systems, text editors, spreadsheets, and all of the wonderful application programs that have been developed to make computers easier to use and people more productive. An important part of the field deals with how to make programming easier and software more reliable. But fundamentally, computer science is a science of *abstraction* — creating the right model for thinking about a problem and devising the appropriate mechanizable techniques to solve it.

Every other science deals with the universe as it is. The physicist's job, for example, is to understand how the world works, not to invent a world in which physical laws would be simpler or more pleasant to follow. Computer scientists, on the other hand, must create abstractions of real-world problems that can be understood by computer users and, at the same time, that can be represented and manipulated inside a computer.



Computação tem a ver com tudo.



CONTEXTO 2

AVANÇOS DA COMPUTAÇÃO E IA

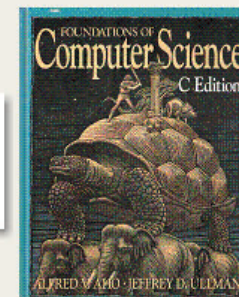


Aho, Alfred V., and Jeffrey D. Ullman. *Foundations of Computer Science*. USA: Computer Science Press, Inc., 1992.

Though it is a new field, computer science already touches virtually every aspect of human endeavor. Its impact on society is seen in the proliferation of computers, information systems, text editors, spreadsheets, and all of the wonderful application programs that have been developed to make computers easier to use and people more productive. An important part of the field

computer science is a science of *abstraction* — creating the right model for thinking about a problem and devising the appropriate mechanizable techniques to solve it.

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A ciência de se criar o modelo certo para pensar sobre um problema e resolvê-lo mecanicamente.

CONTEXTO 2

DESENVOLVIMENTO DE TECNOLOGIA DE IA PARA PRODUÇÃO DE CONHECIMENTO

RECADOS INTERDISCIPLINARES QUE NOS MANDAM



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Perspective | Published: 06 March 2024

Artificial intelligence and illusions of understanding in scientific research

Lisa Messeri & M. J. Crockett

[Nature](#) 627, 49–58 (2024) | [Cite this article](#)

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Abstract

Scientists are enthusiastically imagining ways in which artificial intelligence (AI) tools might improve research. Why are AI tools so attractive and what are the risks of implementing them across the research pipeline? Here we develop a taxonomy of ...

Lisa Messeri [View ORCID ID profile](#)
These authors contributed equally: Lisa Messeri, M.J. Crockett
Department of Anthropology, Yale University, New Haven, CT, USA

M. J. Crockett [View ORCID ID profile](#)
These authors contributed equally: Lisa Messeri, M.J. Crockett
Department of Psychology, Princeton University, Princeton, NJ, USA
University Center for Human Values, Princeton University, Princeton, NJ, USA

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Deborah G. Johnson
Professor Emeritus, Engineering and Society
University of Virginia, Charlottesville, VA, USA

Mario Verdicchio
Dipartimento di Lingue, Letterature e Culture Straniere
Università degli Studi di Bergamo, Bergamo, Italy

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Abstract

A critically important ethical issue facing the AI research community is how AI research and AI products can be responsibly conceptualised and presented to the public. A good deal of fear and concern about uncontrollable AI is now being displayed in public discourse.



DESENVOLVIMENTO DE TECNOLOGIA DE IA PARA PRODUÇÃO DE CONHECIMENTO RECADOS INTERDISCIPLINARES QUE NOS MANDAM



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Contributors

Contributor Metrics

- David Gray Widder, School of Computer Science, Carnegie Mellon University, USA
- Dawn Nafus, Intel Labs, Intel Corporation, USA
- Laura A Dabbish, School of Computer Science, Carnegie Mellon University, USA
- James Herbsleb, School of Computer Science, Carnegie Mellon University, USA

RESEARCH-ARTICLE OPEN ACCESS

Limits and Possibilities for "Ethical AI" in Open Source: A Study of Deepfakes

Authors: David Gray Widder, Dawn Nafus, Laura Dabbish, James Herbsleb

FAcCT '22: Proceedings of the 2022 ACM Conference on Fairness, Accountability, and Transparency • June 2022 •

ABSTRACT

Open source software communities are a significant site of AI development, but "Ethical AI" discourses largely focus on the problems that arise in software produced by private companies. Design, policy and tooling interventions to encourage "Ethical AI" based on studies in private companies risk being ill-suited for an open source context, which operates under radically different organizational structures, cultural norms, and incentives.

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Conformism, Ignorance & Injustice: AI as a Tool of Epistemic Oppression

Published online by Cambridge University Press: 08 April 2024

Martin Miragoli

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Abstract

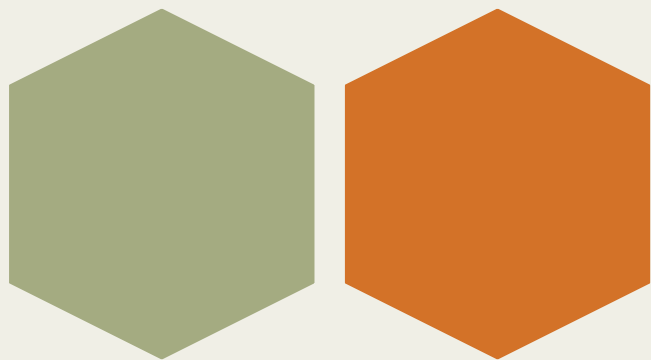
From music recommendation to assessment of asylum applications, machine-learning algorithms play a fundamental role in our lives. Naturally, the rise of AI implementation strategies has brought to public attention the ethical risks involved



Martin Miragoli* Affiliation: COGITO Research Centre, University of Glasgow, Glasgow G12 8QQ, UK

* COGITO Epistemology Research Centre, founded in 2018 by J. Adam Carter, Christoph Kelp and Mona Simion at the University of Glasgow

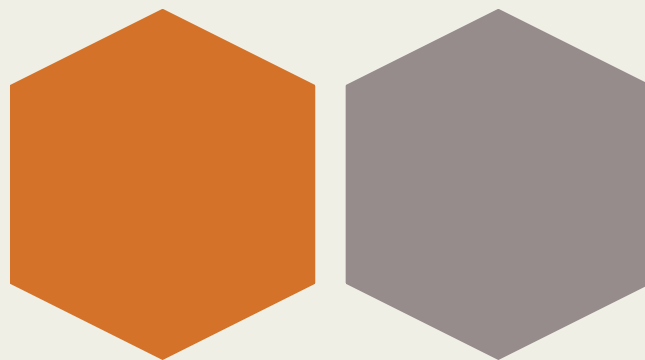
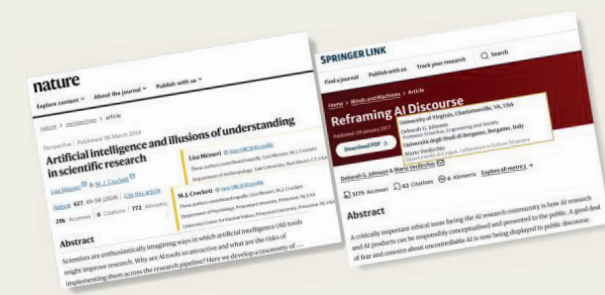
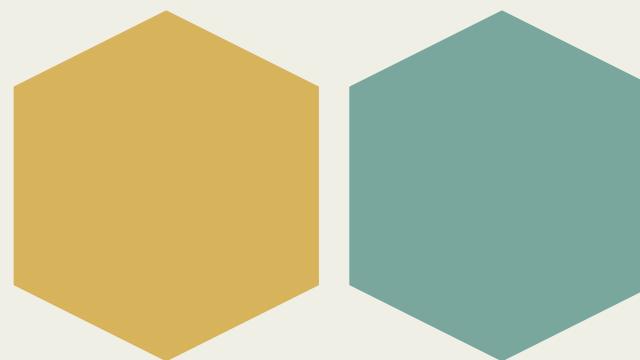
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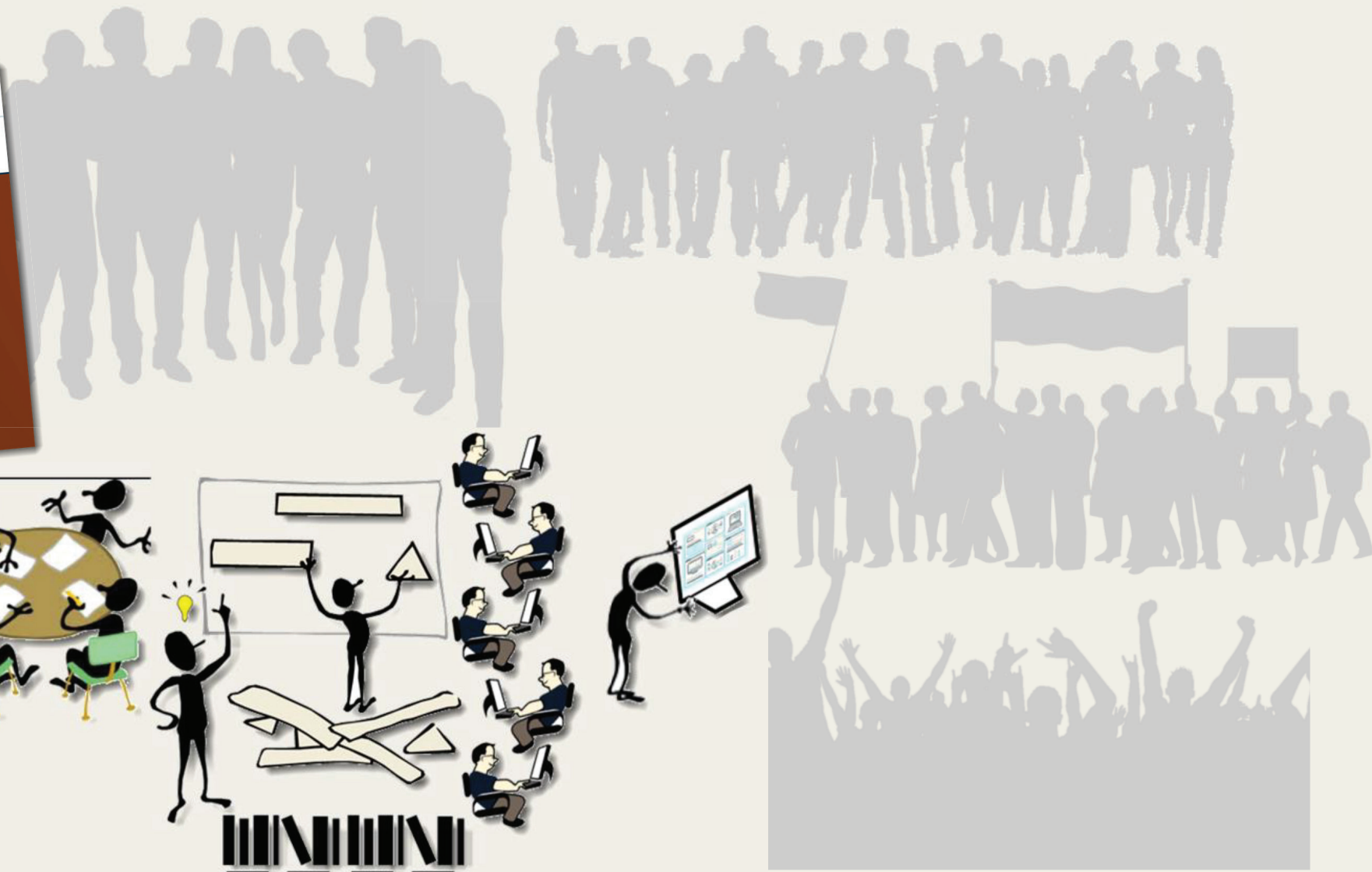
Injustiça Epistêmica
Ameaças ao Pensamento Inovador
Software Aberto, OK;
mas, e abrir Engenharia de Software?



Cegueira Sociotécnica
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O DESENVOLVIMENTO DE IA PRECISA DA PARTICIPAÇÃO DA SOCIEDADE



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VENHAM DESENVOLVER IA ! SOMOS RESPONSÁVEIS !

E venham também formar os desenvolvedores da IA de que precisamos e que queremos, como sociedade!



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Obrigada pela atenção.

clarisse@inf.puc-rio.br



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