Selmer Bringsjord

Professor of Cognitive Science • Professor of Computer Science

Professor of Logic & Philosophy • Professor of Management & Technology

Director, Rensselaer AI and Reasoning (RAIR) Laboratory

Rensselaer Polytechnic Institute (RPI) • Troy NY 12180 USA

Selmer.Bringsjord@gmail.com

http://kryten.mm.rpi.edu/selmerbringsjord.html

4/7/24

Selmer Bringsjord specializes in the logico-mathematical and philosophical foundations of artificial intelligence (AI) and cognitive science (CogSci), in collaboratively building AI systems/robots on the basis (primarily) of computational logic, and in the logic-based and theorem-guided modeling and simulation of rational, human-level-and-above cognition. Work in these areas has been expressed e.g. in over 270 refereed papers/chapters, 6 books, pursued as an investigator in sponsored-research awards of over \$28M, and communicated/debated in person on 6 continents and 33 countries. Though Bringsjord spends considerable engineering time in pursuit of ever-smarter Turing-level computing machines for his much-appreciated sponsors, he claims that "armchair" reasoning time has enabled him to deduce that the human mind will forever be superior to such machines.

Bringsjord received the bachelor's degree from the University of Pennsylvania, where he was heavily influenced by James Ross, and the PhD from Brown University, where he studied under Roderick Chisholm (as did Ross himself). Bringsjord is not unhappy about the apparent fact that he is through Chisholm an intellectual descendant of Leibniz, many of whose views to a high degree align with his own, and whose interest in a rather wide range of intellectual matters matches his own trans-disciplinary $modus\ operandi$. Bringsjord claims to have discovered what Leibniz sought throughout his life: the art of infallibility ($le\ art\ d'infaillibilit\'e$ = "The Art"), which is composed of an underlying language (the $characteristica\ universalis$) and an ensemble of computational reasoning systems ($calculus\ ratiocinator$), and can be used to calmly and enjoyably settle by rational adjudication all manner of dispute.

Bringsjord has long been on faculty at America's oldest technological university: Rensselaer Polytechnic Institute (RPI) in Troy NY; where he currently holds appointments in the Department of Cognitive Science, the Department of Computer Science, and the Lally School of Management, and where as a Full Professor he teaches AI, formal logic, formal human and machine reasoning and decision-making (and applications thereof, e.g. in nuclear strategy and micro-economics), and philosophy of AI and CogSci. In a break from things technical, he also teaches the intellectual history of New York City and the Hudson Valley, which he has never left, and whose Occidental basis grounds out in Grotius. Funding for Bringsjord's r&d has come from the Luce Foundation, the National Science Foundation, the Templeton Foundation, AT&T, IBM, Apple, AFRL, ARDA/DTO/IARPA, ONR, DARPA, AFOSR, France's ANR, and other sponsors. Bringsjord has consulted to and advised many companies in the general realm of intelligent systems, and continues to do so.

Bringsjord's first technical book is What Robots Can & Can't Be (1992, Kluwer), concerned with the future of attempts to create robots whose behave is indistinguishable from humans, and thereafter Superminds: People Harness Hypercomputation, and More (2003, Kluwer). Before the second of these books he wrote, with David Ferrucci, Artificial Intelligence and Literary Creativity: Inside the Mind of Brutus, A Storytelling Machine, published by Erlbaum. He is the author of Abortion: A Dialogue, published by Hackett; this dialogue employs elements of The Art to treat an issue that remains (unnecessarily) contentious to this day. Bringsjord's first novel, Soft Wars, was published by Penguin USA. A forthcoming book, from Oxford University Press, is Gödel's Great Theorems, the current manuscript of which is in use in his pedagogy at RPI. Dr. Bringsjord is the author of papers and essays ranging in approach from the mathematical to the informal, and covering such areas as AI, logic, gaming, philosophy of mind, philosophy of religion, robotics, and human/machine/robot ethics. Recently, with his longtime collaborator Naveen Sundar G., he has erected the Theory of Cognitive Consciousness covering natural and artificial beings, and a corresponding framework (Λ) for measuring the level of such consciousness in such creatures.

Most of Bringsjord's publications are unpublished; for example, he has written the play *Calculi of Death*. (Many of his writings, including some unpublished ones, are available directly through hotlinks in his vitae, available at http://kryten.mm.rpi.edu/selmerbringsjord.html.)

Though following e.g. Leibniz, Descartes, and Paul in rejecting physicalism, Bringsjord is happy to admit that as an avid athlete not particularly thrilled with losing, he takes the life of the body rather seriously. He has skied since Christmas Day at the age of four, and has been a ski patroller for many years at Jiminy Peak in the Taconic Mountains near his main home; he continues to play decent tennis as long as his son is there to help in doubles; and every now and then he still plays a form of golf which, though filled with fun, perhaps doesn't exactly produce scores in line with even such lukewarm descriptors as "sometimes solid."