



SACAIR2020 Virtual 22 – 26 February 2021 Tutorials

09:00 – 09:15	The Ethics of AI Prof Emma Ruttkamp-Bloem, Professor and Head Department of Philosophy, Faculty of Humanities, University of Pretoria
09:30 – 10:30	Disruptive AI Prof AURONA GERBER Associate Professor, Department of Informatics, University of Pretoria
11:00 – 12:30	Bayesian networks in R: An Introduction and some Examples Dr Alta de Waal, Senior Lecturer and Researcher, Department of Statistics, University of Pretoria
13:30 – 15:00	Fuzzy & Annotated Semantic Web Languages Dr Umberto Straccia, Director of Research, at the Istituto di Scienza e di Tecnologie dell'Informazione (ISTI) of the Italian National Council of Research (CNR)
15:30 – 17:00	Deep Learning for Natural Language Processing Dr Jan Buys, Lecturer Computer Science, Department of Computer Science, University of Cape Town

Tutorial Presenters



The Ethics of AI

Prof Emma Ruttkamp-Bloem

Emma Ruttkamp-Bloem is professor and head of the Department of Philosophy at the University of Pretoria. She is the leader of the ethics of AI research group at the Centre for Artificial Intelligence Research (CAIR) in South Africa. She is the founder of the CAIR/UP 'Artificial Intelligence for Society' Symposium. She is a member of the UNESCO World Commission for Ethics of Scientific Knowledge and Technology (COMEST) for the period 2020-2023. She was the chairperson of the UNESCO Ad Hoc Expert Group (AHEG) on the ethics of artificial intelligence tasked to prepare a recommendation to UNESCO member states for a global instrument on the ethics of AI by September 2020. Currently, in the ethics of artificial intelligence, she works on themes in machine ethics, ethics of social robotics, data ethics, and AI and children, and she is an AI ethics policy researcher.



Disruptive AI

Prof AURONA Gerber

Prof AURONA Gerber is an Associate Professor in the Department of Informatics and Information Systems in the EBIT faculty at the University of Pretoria. She is a rated researcher as well as a chair of the Centre for AI Research Group in AI for Development & Innovation. Her research is in various aspects of Information Systems, including Data Science and Applied AI, AI Disruption, Ontologies within IS, as well as Design Science Research. She is the current president of SAICSIT, the Southern African Institute for computer scientists and information technologists, as well as treasurer of the association of information systems (AIS) SIGODIS (Intelligent IS Systems) Special Interest Groups.



Bayesian networks in R: An Introduction and some Examples

Dr Alta de Waal

Alta de Waal is a senior lecturer at the Department of Statistics, University of Pretoria. She has 20 years of experience in the development and application of Bayesian networks and other AI fields such as Natural Language Processing (NLP).

Fuzzy & Annotated Semantic Web Languages



Dr Umberto Straccia

Umberto Straccia (male) is Director of Research in Computer Science at the Information Science and Technology Institute “A. Faedo” of the National Research Council, Pisa, Italy. Umberto Straccia is the pioneering scientist in extending Semantic Web Languages (OWL 2 and RDFS) and their logical counterparts, towards representing, reasoning and learning in presence of fuzzy/uncertain information, focussing on foundational as well as on practical/implementational aspects. He has held various invited presentations and tutorials in well-known venues such as AAAI (Association for the Advancement of Artificial Intelligence), ESWC (European Semantic Web Conf.), SUM (Int. Conf. on Scalable Uncertainty Management) and Reasoning Web Summer School. He is member of various Editorial boards among which Fuzzy Sets and Systems (Elsevier) and Int. Journal On Semantic Web and Information Systems (IGI-Global) and Chair, Track Chair, or PC Chair of conferences, such as RR (Int. Conf. on Web Reasoning and Rule Systems), ESWC, SUM, ISWC (Int. Semantic Web Conference), and Senior PC Member of conferences such as ECAI (European Conf. on Artificial Intelligence), IJCAI (Int. Joint Conf. on Artificial Intelligence), UAI (Conf. on Uncertainty in Artificial Intelligence) and AAAI. Cuurrently, he is the coordinator for CNR in the EU funded project TAILOR: Trustworthy AI - Integrating Learning, Optimisation and Reasoning, 54 partners 12Meuro funding. His Google H-index is 49.



Deep Learning for Natural Language Processing

Dr Jan Buys

Jan Buys is a Lecturer in the Department of Computer Science at the University of Cape Town. His research area is Natural Language Processing and Machine Learning. His current research focusses on deep learning for text generation, linguistic structure prediction, and low-resource language processing. Previously, he was a postdoctoral researcher at the University of Washington's Natural Language Processing research group, working with Yejin Choi. Jan completed his PhD at the University of Oxford, supervised by Phil Blunsom. Before that he obtained Masters and undergraduate degrees in Computer Science at the University of Stellenbosch.