Call for Papers

AISB Symposium on Conversational Artificial Intelligence (SoCAI)
Submission Deadline: 28 January, 2020

The idea of building machines that can communicate about the world, by listening to and responding to humans in language that is transparent and contextually attuned, is an essential goal of research and development in the area of natural language processing. It is therefore not surprising that conversational artificial intelligence has emerged as a major field of academic research and as a fundamental objective of industrial efforts in the technological sphere. Notwithstanding wide-ranging enthusiasm for developing these types of agents, however, robust technologies allowing information processing machines to use language as a medium remain elusive. Familiar issues from theoretical accounts of language, such as the essential role of context in referential semantics, the _ad hoc_ nature of conceptual representations, and the environmental grounding of semiotics, have proved hard problems for existing techniques in natural language processing.

Conversational AI is arriving all the same. Demand for industrial applications is generating an expectation of domain-specific technology that provides a high-precision natural language interface between users and complex data. Elsewhere, growing interest in and acceptance of the idea of holding human-like conversations with information processing machines invites a combination of data-driven and rules-based approaches to constructing systems that exhibit general world knowledge over the course of fluid exchanges involving anaphora resolution, long-range dependencies, and semantic memory. This emerging field of applications gives rise to difficult questions regarding the expectations of humans interacting with these systems and the responsibilities of system architects.

We will be holding a one day Symposium on Conversational Artificial Intelligence (SoCAI) as part of the 2020 conference of the Society for Artificial Intelligence and Simulated Behaviour (AISB), taking place at St. Mary's University in London on 6-9 April 2020. Our goal is to bring together researchers, developers, commentators, and others involved in or interested in the unfolding advent of language-using machines in order to discuss progress, prospects, and impediments in this area.

Submissions

We invite submissions of papers addressing topics that are, in a broad sense, related to conversational AI. Submissions may include research papers, technical reports, system descriptions, reports on works-in-progress, papers exploring theoretical issues in developing conversational AI technology, reports on industrial experience in the field, and discussions of the philosophical and social issues surrounding the development and deployment of conversational AI. Topics of interest include (but are by no means limited to):

- dialogue modelling
- machine learning approaches to conversational AI
- rules-based approaches
- speech processing and interpretation
- intent and entity classification
- interpretation of multiple intents in single utterances

- named entity recognition
- dialogue management
- multi-turn dialogue
- response generation
- domain specific systems
- general conversational systems
- assembling and analysing data for conversational AI
- semantic context and speech-to-text
- referential semantics in conversational AI
- pragmatics and conversational AI
- theoretical linguistics in relation to AI
- philosophical, ethical, and social issues
- industrial experiences in conversational AI

Important Dates:
- *submission deadline:* 17:00 GMT, 28 January, 2020
- *notification:* 21 February, 2020
- *camera-ready final drafts:* 28 February, 2020
- *conference:* 6-9 April, 2019 (exact date of our symposium TBD)

Keynote Speaker:
Prof. Alex Lascarides
Chair in Semantics, School of Informatics, University of Edinburgh

We're very pleased to announce that our keynote speaker will be Alex Lascarides. Prof. Lascarides holds a Chair in Semantics at the University of Edinburgh's School of Informatics, and has been involved with the University since her time as a Master's student. Her research addresses formal semantic and pragmatic accounts of language, encompassing theoretical and computational approaches to modelling the ways that humans communicate with one another in their environments. She has been involved in a number of past and present projects funded by research organisations across Europe, including Segmented Discourse Representation Theory, the Semantics of Gestures, and Strategic Conversation. Her technical and philosophical perspectives on the way that both humans and non-human agents use language to accomplish goals in the world will provide a foundation for an engaging day of presentations and discussions about the current state-of-the-art and the future of conversational AI.

Programme Committee:
(to be expanded)

Dr. Adrien Barbaresi, *Berlin-Brandenburg Academy of Sciences and Humanities*
Prof. Pat Healey, *Queen Mary University of London*
Prof. Shalom Lappin, *University of Gothenburg*
Dr. Matt Purver, *Queen Mary University of London*
Dr. Mehrnoosh Sadrzadeh, *University College London*

Important Dates:
- *submission deadline:* 17:00 GMT, 28 January, 2020
- *notification:* 21 February, 2020
- *camera-ready final drafts:* 28 February, 2020
- *conference:* 6-9 April, 2019 (exact date of our symposium TBD)

Authors may submit papers of up to eight pages (not counting references). Please submit papers through our symposium portal:

https://easychair.org/conferences/?conf=socai1

And keep an eye on our symposium website for any forthcoming updates:

https://socai-aisb.github.io

All submissions will be peer-reviewed by members of our programme committee. Authors of accepted papers will be expected to give 30 minute presentations at the symposium. (Please note participating authors will be required to register with the conference.) Papers will be published as part of the proceedings of AISB 2020.

Review will be double-blind, so please avoid including any information which might identify authors in submissions. Submissions should be made according to the AISB style guidelines. LaTeX and Word Templates can be found here (direct link to download):

http://acl2020.org/downloads/acl2020-templates.zip

Symposium participants will be able to take part in a range of other symposia and workshops taking place at AISB 2020. For more details on the conference, including information about location, accommodation, and registration, please follow this link:

https://aisb20.wordpress.com/

See here for a pdf version of this call for papers:

https://socai-aisb.github.io/cfp-pdf.pdf

Contact:
For any enquiries regarding the symposium, please contact Stephen McGregor by email at stephen@action.ai.