

Date: 22-June-2008
From: Philip McCarthy pmccarthy@mail.psyc.memphis.edu
Scott Crossley sc544@msstate.edu
Subject: Applied Linguistics and Natural Language Processing

Full Title: Applied Natural Language Processing

Date: 19-May-2009 - 21-May-2009
Location: Sanibel Island, Florida, USA
Contact Person: Philip McCarthy or Scott Crossley
Meeting Email: Philip McCarthy <pmccarthy@mail.psyc.memphis.edu>
Scott Crossley <sc544@msstate.edu>
Web Site: http://www.msstate.edu/dept/english/applied_nlp/flairs_2009
Linguistic Field(s): Computational/Applied/General Linguistics

Call Deadline: 23-Nov-2008

Applied Natural Language Processing
Special Track at
the 22nd International FLAIRS Conference
In cooperation with the American Association for Artificial Intelligence

Sundial Beach and Golf Resort
Sanibel Island, Florida
May 19th-21st, 2009

Paper submission deadline: November 23rd, 2008.

Notifications sent by: Late January, 2009.

Call for Papers

Goal

The track of Applied Natural Language Processing is a forum for researchers working in natural language processing (NLP), computational linguistics (CL), applied linguistics (AL) and related areas.

NLP/CL developments in fields such as textual studies, speech recognition, speech production, data mining and numerous other fields have led to a rapid growth in interest in tools able to understand, organize, and extract information from natural language sources. This interest includes the analysis of online materials, most of them in textual form or text combined with other media (visual, audio), the use of innovative human-computer interfaces, such as interactive agents, which benefit from language understanding, and the use of computational tools to facilitate intelligent tutoring systems and instructional methodology. In addition, natural

language processing can facilitate human-computer interaction for people with special needs, assist in the organization of classification systems, and coordinate text segmentation.

Papers and contributions on all issues are very much welcome, but the track emphasizes and encourages submissions that present actual *applications* that can benefit from or have an impact on NLP/CL.

General Topics

We invite original papers (i.e. work not previously submitted, in submission, or to be submitted to another conference during the reviewing process) that describe work in, but not limited to, the following areas:

1. Paraphrase or Entailment evaluation approaches
2. Textual assessment indices
3. NL-based Knowledge Representations and Systems
4. Coreference Resolution
5. Word Sense Disambiguation
6. Text Cohesion and Coherence
7. Dialogue Management and Systems
8. Language Generation
9. Language Models
10. Human Computer Interfaces - in particular, multimodal human-computer communication and language as the only acceptable human-computer communication channel for the handicapped and elderly
11. Machine Learning applied to NL problems
12. Multilingual Processing
13. Standardization, Language Resources, Corpora Building, and Annotation Languages
14. NL in Learning Environments

15. Semantic Web, Ontologies, Reasoning
16. Applications: Machine Translation, Summarization, Intelligent Tutoring, Question Answering, Information Extraction, etc.
17. Syntax
18. Semantics
19. Applied Linguistics and First and Second Language Acquisition
20. English for Specific Purposes
21. Others
22. The special topic: *The User-Language Paraphrase Challenge*

Special Topic

This year, the ANLP track features a special topic, which is IN ADDITION TO general topics for the track. The special topic is the *User-Language Paraphrase Challenge*.

We are pleased to introduce the *User-Language Paraphrase Challenge*. We use the term *User-Language* to refer to the natural language input of users interacting with an intelligent tutoring system (ITS). The primary characteristics of user-language are that it is short (typically a single sentence) and that it is unedited (e.g., it is replete with typographical errors and lacking in grammaticality). We use the term *paraphrase* to refer to ITS users' attempt to restate a given *target sentence* in their own words such that a produced sentence, or *user response*, has the same meaning as the target sentence. The corpus in this challenge comprises 1998 target-sentence/student response text-pairs, or *protocols*. The protocols have been evaluated by expert human raters along 10 dimensions of paraphrase characteristics. Along with the protocols, the database comprising the challenge includes 10 computational indices that have been used to assess these protocols. The challenge we pose for researchers is to describe and assess their own approach (computational or statistical) to evaluating, characterizing, and/or categorizing, any, some, or all of the paraphrase dimensions in this corpus. The purpose of establishing such evaluations of user-language paraphrases is so that ITSs may provide users with accurate assessment and subsequently facilitative feedback, such that the assessment would be comparable to one or more trained human raters. As such, these evaluations will help to develop the field of *natural language assessment and understanding*. For full details of the challenge and all data go to: <http://csep.psyc.memphis.edu/mcnamara/link.htm> and click on User Language Paraphrase Corpus.

Submission Guidelines for the ANLP track

Interested authors (for the general ANLP track or the special topic) should format their papers according to [AAAI formatting guidelines](#). The papers should be original work (i.e., not submitted, in submission, or submitted to another conference while in review). Papers should not exceed 6 pages and are due by November 23rd, 2008. For FLAIRS-22, the 2009 conference, the reviewing is a double blind process. Fake author names and affiliations must be used on submitted papers to provide double-blind reviewing. Papers must be submitted as PDF through the Chair conference system. (n.b. Do not use a fake name for your EasyChair login - your EasyChair account information is hidden from reviewers). Authors should indicate the special track of ANLP for submissions. All submissions will be done electronically via the FLAIRS web submission system available through the paper submission site at <http://www.easychair.org/conferences/?conf=flairs22>
Please, check the website <http://www.flairs-22.info/> for information regarding submission.

Conference Proceedings

Papers will be refereed and all accepted papers will appear in the conference proceedings which will be published by AAAI Press.

Organizing Committee

Philip McCarthy, Institute for Intelligent Systems
Scott Crossley, Mississippi State University

Proposed Program Committee (additions will be made)

Stephen Anthony, University of California San Diego, USA
Sivaji Bandyopadhyay, Jadavpur University, India
Cosmin Adrian Bejan, University of Texas at Dallas, USA
Cederick Bellissens, Institute for Intelligent Systems, USA
Chutima Boonthum, Hampton University, UK
Stephen Briner, DePaul University, USA
Peter Clark, Boeing, USA
Nicoletta Calzolari, University of Pisa, Italy
Joao Cordeiro, University of Beira Interior, Portugal
Andrea Corradini, University of Potsdam, Germany
Kyle Demsey, Institute for Intelligent Systems, USA
Gael Dias, University of Beira Interior, Portugal
Sidney D'Mello, Institute for Intelligent Systems, USA
Nick Duran, Institute for Intelligent Systems, USA
Asif Ekbal, Jadavpur University, India
Anna Feldman, Montclair State University, USA
Leo Ferres, Carleton University, Canada
Andrew Gordon, University of Southern California, USA

Charles Hall, University of Memphis, USA
Christian Hempelmann, Hakia Inc., USA
Diana Inkpen, University of Toronto, Canada
Pamela Jordan, University of Pittsburgh, USA
Christel Kemke, University of Manitoba, Canada
Yılmaz Kılıçaslan, Trakya University, Turkey
Christopher Kurby, Northern Illinois University, USA
Max Louwerse, University of Memphis, USA
Xiaofei Lu, Pennsylvania State University, USA
Manish Mehta, Georgia Institute of Technology, USA
Rada Mihalcea, University of North Texas, USA
Roberto Navigli, University of Rome La Sapienza, Italy
Tomasz Obreński, Adam Mickiewicz University, Poland
Andrew Olney, Institute for Intelligent Systems, USA
Constantin Orasan, University of Wolverhampton, UK
Katherine M Forbes Riley, University of Pittsburgh, USA
Graeme Ritchie, University of Aberdeen, UK
Vasile Rus, University of Memphis, USA
Stacey Todaro, Northern Illinois University, USA
Savaş Yıldırım, Istanbul Bilgi University, Turkey

Further Information

Questions regarding the ANLP Special Track should be addressed to the track co-chairs:

Philip McCarthy, pmccarthy@mail.psyac.memphis.edu

Scott A. Crossley, sc544@msstate.edu

Questions regarding the ANLP Special topic should be addressed to Philip McCarthy,

pmccarthy@mail.psyac.memphis.edu

Questions regarding any other FLAIRS special tracks should be addressed to the special track co-ordinator: Philip McCarthy, pmccarthy@mail.psyac.memphis.edu

Questions regarding the conference should be addressed to the FLAIRS-2009 program co-chairs:

David Wilson, University of North Carolina Charlotte, davils@uncc.edu

Geoff Sutcliffe, University of Miami, geoff@cs.miami.edu

General questions concerning the conference should be addressed to the FLAIRS-2008 conference co-chairs:

Douglas D. Dankel II, University of Florida, ddd@cise.ufl.edu

Special Tracks Chair

Philip McCarthy: pmccarthy@mail.psyac.memphis.edu

Invited Speakers

- [Eugene Freuder](#), University College Cork, Ireland

Professor Freuder is the Director of the Cork Constraint Computation Centre in the Department of Computer Science at University College Cork in Ireland. He received his B.A., magna cum laude, in mathematics from Harvard and a Ph.D. in computer science from M.I.T. He has been elected a Fellow of the American Association for the Advancement of Science, the Association for the Advancement of Artificial Intelligence, and the European Coordinating Committee for Artificial Intelligence, and is a Member of the Royal Irish Academy. He received the first Research Excellence Award of the Association for Constraint Programming, and served as Executive Chair of the Organizing Committee of the series of International Conferences on Principles and Practice of Constraint Programming, and as the founding Editor-in-Chief of the Constraints journal. In the Citeseer database of most cited authors in computer science Professor Freuder is ranked in the top one-tenth of one per cent. He has played a key role in obtaining over 60 million dollars in funding from government and industry to support scientific research.

- [Arthur Graesser](#), University of Memphis, USA

AutoTutor and the World of Pedagogical Agents: Intelligent Tutoring Systems with Natural Language Dialogue

AutoTutor is a computer tutor that helps students learn concepts in science and technology by holding a conversation in natural language. Students input their contributions through a keyboard or speech, whereas AutoTutor communicates through an animated conversational agent with speech, facial expressions, and some rudimentary gestures. A recent version tracks and responds to learner emotions. Another version is integrated with an interactive simulation environment. Assessments of AutoTutor on learning gains have been quite promising (nearly a letter grade) compared with reading a textbook. This presentation describes AutoTutor and some of its offspring with animated pedagogical agents.

Art Graesser is a professor in the Department of Psychology, an adjunct professor in Computer Science, and co-director of the Institute of Intelligent Systems at the University of Memphis. Dr. Graesser received his Ph.D. in psychology from the University of California at San Diego and was a visiting researcher at Yale University, Stanford University, and Carnegie Mellon University. His primary research interests are in cognitive science, discourse processing, and the learning sciences. More specific interests include knowledge representation, question asking and answering, tutoring, text comprehension, inference generation, conversation, reading, education, memory, artificial intelligence, and human-computer interaction. He served as editor of the journal *Discourse Processes* (1996-2005) and is the current editor of *Journal of Educational Psychology*. He is president of the Society for Text and Discourse and Artificial Intelligence in Education. In addition to publishing over 400 articles in journals, books,

and conference proceedings, he has written two books and edited nine books (one being the Handbook of Discourse Processes). He has designed, developed, and tested intelligent software in learning, language, and discourse technologies, including AutoTutor, Coh-Metrix, HURA Advisor, SEEK Web Tutor, MetaTutor, ARIES, Question Understanding Aid (QUAID), QUEST, and Point&Query.

- [Jan Wiebe](#), University of Pittsburgh, USA

Jan Wiebe is Professor of Computer Science and Director of the Intelligent Systems Program at the University of Pittsburgh. Her research with students and colleagues has been in discourse processing, pragmatics, word-sense disambiguation, and probabilistic classification in NLP. Her most recent work investigates automatically recognizing and interpreting expressions of opinions and sentiments in text, to support NLP applications such as question answering, information extraction, text categorization, and summarization. Her current and past professional roles include ACL Program Co-Chair, NAACL Program Chair, NAACL Executive Board member, Computational Linguistics and Language Resources and Evaluation Editorial Board member, AAI Workshop Co-Chair, ACM Special Interest Group on Artificial Intelligence (SIGART) Vice-Chair, and ACM-SIGART/AAAI Doctoral Consortium Chair.

Conference Web Sites

Paper submission site: <http://www.easychair.org/conferences/?conf=flairs22>

NLP Special Track web page: http://www.msstate.edu/dept/english/applied_nlp/flairs_2009

FLAIRS-2009 conference web page: <http://www.flairs-22.info>

Florida AI Research Society (FLAIRS): <http://www.flairs.com>

[FLAIRS 2009 home page](#)