

SIGdial – Special Interest Group on Discourse and Dialogue

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Abstract

This paper describes the ACL and ISCA Special Interest Group on Discourse and Dialogue (SIGdial). Objective, activities, people, and plans are presented.

1. Introduction

SIGdial is a Special Interest Group on Discourse and Dialogue [1] which was formed in November 1997. It was originally formed as a Special Interest Group (SIG) of the Association for Computational Linguistics (ACL) [2]. In spring 2001, however, SIGdial got a second parent organisation, i.e. the International Speech Communication Association (ISCA) [3]. Several ISCA members had felt a need for a SIG in the discourse and dialogue area and SIGdial was found to already have much of the desired functionality. Thus, rather than establishing a new and competing ISCA SIG, it was decided that SIGdial should reach out to the ISCA community and also become an ISCA SIG.

SIGdial is a cooperative organisation driven entirely by volunteers among its membership which counts more than 200 people from academia and industry in Asia, Australia, Europe and North America.

The first SIGdial elections were held in the summer of 1999. Officers are elected for a period of two years. Thus new elections will be held in the summer of 2001.

The following sections describe the objective of SIGdial (Section 2), SIGdial activities (Sections 3), the people involved in running SIGdial (Section 4), why and how to join SIGdial (Section 5), and plans ahead (Section 6).

2. Objective

The objective of SIGdial is to promote theoretical, empirical and applied research on computational discourse and dialogue. To achieve its goal SIGdial seeks to stimulate collaboration and interest in the field and encourages work on

- developing, challenging, and testing *theories* of discourse and dialogue by analysing *corpora* from interactions with actual or simulated unimodal or multimodal dialogue systems or from human-human interaction;
- development and distribution of reusable discourse and dialogue processing *components*, generic *architectures* and common *toolkits* for building complete unimodal or multimodal dialogue systems;
- exploration and development of techniques and metrics for the *evaluation* of discourse and dialogue components and systems;

- development of *standards* and *guidelines* for discourse and dialogue transcription and annotation;
- sharing of discourse and dialogue *resources*.

3. Activities

To meet its objective SIGdial performs and encourages a number of activities:

- Web: Most SIGdial activities are supported by the SIGdial web site.
- SIGdial workshops: This is a regular series of annual workshops which serve to bring in particular the SIGdial community together.
- Workshop endorsement: Endorsement of workshops in the field of discourse and dialogue, and active participation in their organisation.
- Calendar: An overview of SIGdial relevant events.
- Resources: A collection of links to discourse and dialogue coding schemes, language resources, spoken language dialogue systems, tools, methods, systems and interfaces, projects, regular events, and references.
- Liaison: Liaison with relevant and related organisations and communities.
- Collaboration: Collaboration agreement with external parties.
- Mailing list: Communication among SIGdial members is supported by a members mailing list.
- Business meetings: Update on recent activities and discussion of plans, problems and new activities.

In the following each of the above activities are described in more detail.

3.1. Web

SIGdial has a web site at <http://www.sigdial.org>. The web site serves to disseminate information not only to SIGdial members but also to people outside the SIGdial community who may have an interest in discourse and dialogue aspects. Figure 1 shows the overall set of links which are available from all SIGdial web pages.

The web site is hosted by NISLab in Denmark. In general, all members are responsible for its maintenance. If a member finds that something is missing or should be updated, the member should send an email explaining what should be done to the SIGdial webmaster. The information officer is responsible for updating pages concerning calendar and

events whereas the president takes care of other pages which cannot be updated by the members themselves.

Members are themselves responsible for updating their personal information in the membership database, cf. the Membership button in Figure 1, and for notifying the person responsible for mailing list maintenance of any changes to their email addresses. Members are also collectively responsible for building up the resource page, cf. Section 3.5 and the Resources button in Figure 1, by adding references to any resource they may be aware of and which is of potential SIGdial interest.



Figure 1. Overall links at the SIGdial web site.

3.2. SIGdial workshops

To strengthen collaboration and bring members from the SIGdial community together the first SIGdial workshop on Discourse and Dialogue was held on 7-8 October in Hong Kong in conjunction with ACL'2000. There has been a lot of activity in the area of discourse and dialogue with many workshops on various sub-topics of the area. However, a regular place to meet and present work on discourse and dialogue in a forum to receive attention from the entire SIGdial community and also from researchers outside this community was missing. This was the background for organising the first SIGdial workshop with the intention to make it a regular event.

The topics for the first workshop included formal, corpus-based, implementational and analytical work on discourse and dialogue, with a focus on the following three themes:

- Dialogue systems, i.e. models, methods, strategies, tools and architectures related to spoken, multi-modal, and text/web based dialogue systems;
- Corpora and corpus tools, i.e. support for corpus-based work on discourse and dialogue;
- Pragmatic and/or semantic modelling, i.e. the pragmatics and/or semantics of discourse and dialogue (beyond a single sentence), and specific aspects of discourse and dialogue structure.

In addition, a special-theme session on principles for evaluation of dialogue systems was included.

The workshop was a successful event with about 35 participants, 18 paper presentations, and lively discussions after each presentation. The online workshop proceedings are

found at <http://www.sigdial.org/sigdialworkshop/proceedings/>. Hardcopies can be bought via ACL.

At the first workshop there was strong support for organising a second SIGdial workshop already in 2001. This is now happening. The second SIGdial workshop has been scheduled to take place on 1-2 September in Aalborg, Denmark, right before Eurospeech'2001. The three themes of dialogue systems, corpora and corpus tools, and the pragmatics and/or semantics of discourse and dialogue are still in focus. However, the multimodal aspect is slightly more emphasised than last year both as regards dialogue systems and corpus work. Information on SIGdial workshops can be found at <http://www.sigdial.org/workshops.html>

3.3. Workshop endorsement

A main purpose of SIGdial is to promote interest in discourse and dialogue and to provide members with an opportunity to meet and exchange news of recent research developments. Therefore, in addition to its own workshops, SIGdial endorses high-quality workshops in the area of discourse and dialogue that are likely to further this purpose.

SIGdial welcomes applications from organisers of workshops for SIGdial endorsement of the events. To apply for endorsement one should send an email to the SIGdial president with sufficient information about the event. Guidelines for how to apply are found via the SIGdial Events page, cf. Figure 1.

Endorsement of a particular event is discussed among and decided by the president, the vice president, the secretary and the science advisory committee (see Section 4). Applicants will usually receive an answer with the decision about two weeks after they applied.

The decision for or against endorsement is made using the following criteria:

- Does the (prospective) workshop have purposes and content central to the SIGdial charter.
- Is the workshop likely to be of sufficient quality to merit the attention of SIGdial members.
- Will the workshop be open (subject to general size limitations) to the SIGdial membership. Will there be some permanent archive (e.g., proceedings) of the workshop that will be available (perhaps for purchase) to SIGdial members who are not able to attend in person.

If an event is endorsed by SIGdial, the organisers can advertise this e.g. in the call for papers and on the event's web page. This is meant to be a kind of stamp which signifies that the content of the event is expected to be highly relevant from a SIGdial point of view and of good quality.

SIGdial advertises endorsed events on its SIGdial Events page, cf. Figure 1. Moreover, such events are marked with the SIGdial logo in the Calendar, cf. Section 3.4 and Figure 1.

If proceedings of endorsed events are made electronically available, SIGdial expects to receive a pointer to where they can be found so that a link can be made to them from the SIGdial web site.

Six events were endorsed in 1999, six in 2000 and at the time of writing six have been endorsed in 2001. Endorsed events include the ones listed below:

- 3rd 4th and 5th workshops on semantics and pragmatics in dialogue;
- 1st and 2nd IJCAI workshops on knowledge and reasoning in practical dialogue systems;
- 3rd workshop on human-computer conversation;
- 15th Twente workshop on language technology: interaction in virtual worlds.
- ACL workshop on the relationship between discourse/dialogue structure and reference;
- ACL workshop: Towards standards and tools for discourse tagging;
- ACL-EACL workshop on evaluation for language and dialogue systems;
- NAACL workshop on adaptation in dialogue systems;
- NAACL/ANLP workshop on conversational systems;
- AAI fall symposium on psychological models of communication in collaborative systems;
- AAI spring symposium, my dinner with R2D2: Natural dialogues with practical robotic devices;
- AAI fall symposium, building dialogue systems for tutorial applications;
- LREC2000 workshop: From spoken dialogue to full natural interactive dialogue: Theory, empirical analysis and evaluation;
- ESSLI workshop on information structure, discourse structure and discourse semantics;
- ISCA tutorial and research workshop on: prosody in speech recognition and understanding.

3.4. Calendar

The information officer collects and maintains information about upcoming events of relevance to the SIGdial community. Such events are advertised on the Calendar page, cf. Figure 1.

The calendar page has two main sections. One section contains links to call for papers and provides an overview of submission deadlines and venues. The other section contains links to upcoming events and provides an overview of date and place. There is also an archive of past events which have been announced on the calendar page.

Advertised events include large conferences, such as ACL, Eurospeech and IJCAI (international joint conference on artificial intelligence), which also accept discourse and dialogue papers, events in areas which are related to the SIGdial area, such as ICoS (inference in computational semantics), SIGIR (conference on research and development in information retrieval), and the international World Wide Web conference, and finally workshops which address aspects of discourse and dialogue which e.g. is typically the case for SIGdial endorsed events, cf. Section 3.3.

3.5. Resources

At the first SIGdial workshop it was discussed and decided to put an increased effort on resources. Therefore, SIGdial now maintains a resource page, cf. Figure 1, which all members can extend with links to new resources, including brief descriptions of them.

For the moment the resource page has nine categories of discourse and dialogue resources as listed below. New categories may be added by sending an email to the SIGdial webmaster.

- Coding schemes: Schemes for annotation of discourse and dialogue phenomena;
- Language resources: Various spoken and written language corpora;
- Methods: Guidelines relating e.g. to corpus handling or to the development of dialogue systems;
- Projects: Ongoing projects which aim to produce results that are of potential interest to the SIGdial community;
- References: References to discourse and dialogue relevant books, journals, proceedings, papers, etc.
- Regular events: Links to information on regular events, including online proceedings, if available.
- Spoken Language Dialogue Systems: Links to pages which describe spoken language dialogue systems and often also offer demos.
- Systems and interfaces: Spoken or written interfaces to systems.
- Tools: Tools in support e.g. of annotation or of the building of spoken dialogue systems.

3.6. Liaison

SIGdial has a number of liaisons. The job of liaisons is to act as a kind of bridge between the organisation or community with which they liaise and SIGdial, and thus to ensure that relevant information flows in both directions. For example, a liaison may make SIGdial aware of certain needs of a particular group, interesting activities in the organisation with which s/he liaises, or s/he may make the organisation and its members aware of SIGdial activities and how the members of the organisation may benefit from them.

For the moment SIGdial has liaisons with AAI, CHI and ICSLP/ISCA, respectively, and with ACL students.

3.7. Collaboration

SIGdial seeks collaboration with external organisations. The aim is that such collaboration should be of benefit to both parties.

Since autumn 2000 SIGdial has such a collaboration with Elsnets, the European Language and Speech Network. Elsnets has a newsletter, Elsnetsnews, and Elsnets has generously offered one page in each issue of Elsnetsnews for SIGdial purposes. The first SIGdial contribution in Elsnetsnews can be found in issue 9.3. Elsnetsnews can be freely downloaded in pdf format from <http://www.elsnets.org/elsnetsnews.html>.

SIGdial benefits from the collaboration by promoting its activities and view points to the Elsnets community and by having a regular place where members can find written SIGdial contributions. Elsnets benefits from the collaboration by promoting itself and Elsnets to SIGdial members across the world.

3.8. Mailing list

To facilitate communication among members SIGdial has a moderated mailing list, sigdial@loria.fr. Emails sent on this list will go to all members. The mailing list is hosted by Loria, Nancy, in France.

3.9. Business meetings

Business meetings are open to all members. They are meant to provide an overview of what has happened in SIGdial since the last business meeting, to bring up plans, problems and other issues for discussion, and to stimulate new activities.

The most recent business meeting was held in connection with the first SIGdial workshop. The next business meeting is expected to take place in connection with this year's SIGdial workshop.

4. People

SIGdial is, as mentioned, staffed solely by volunteers. The people with overall responsibility for the SIG are elected. In addition, many other SIGdial members contribute to running the SIG e.g. by collecting and distributing information about relevant events, liaising with related communities and organisations, moderating the SIGdial members mailing list, and contributing to the contents of the SIGdial web pages.

The elected officers and members appointed to take care of specific tasks include at the time of writing (cf. also the Organization button in Figure 1):

- President: Laila Dybkjær (laila@nis.sdu.dk)
- Vice President: David Traum (traum@ict.usc.edu)
- Secretary: Barbara di Eugenio (bdieugen@eecs.uic.edu)
- Science Advisory Committee:
 - Jennifer Chu-Carroll (jenc@us.ibm.com)
 - Morena Danieli (morena.danieli@loquendo.com)
 - Diane Litman (diane@research.att.com)
 - Akira Shimazu (shimazu@jaist.ac.jp)
 - Michael Strube (michael.strube@eml.villa-bosch.de)
 - Jan van Kuppevelt (kuppevelt@ims.uni-stuttgart.de)
- Information Officer: Pamela Jordan (pjordan@pitt.edu) with contributions from Kristiina Jokinen (kjokinen@uih.fi);
- AAAI Liaison: Diane Litman (diane@research.att.com);
- ACL Student Liaison: Weiqun Xu (wqxu@nlp.ia.ac.cn);
- CHI Liaison: Nils Dahlbäck (nilda@ida.liu.se);
- ICSLP/ISCA Liaison: Julia Hirschberg (julia@research.att.com);

- Mailing list maintenance: Laurent Romary (laurent.romary@loria.fr);

A comprehensive list of SIGdial members is maintained on the membership page, cf. Figure 1.

5. Why and how to join SIGdial

SIGdial has more than 200 members. We welcome people who are working in the area of discourse and dialogue but are not yet SIGdial members to join, as well.

Members receive information and participate in discussions focused on discourse and dialogue processing. The membership constitutes an ideal audience for issues pertaining to discourse and dialogue. Members are expected to contribute to the collective knowledge and resources of the group by sharing their own.

New members join SIGdial and subscribe to the moderated SIGdial members mailing list by filling in the form available from the Membership page, cf. Figure 1.

New members should also fill in their personal profile at the web site with contact information and information about their interests. This may help other SIGdialers when they are looking for experts or collaborators in a particular SIGdial sub-area. When a new member joins SIGdial this person will receive a confirmation of membership by email. This email also specifies where to find the profile form.

6. Plans ahead

SIGdial will continue to stimulate collaboration and interest in the field of discourse and dialogue through the already ongoing activities described in Section 3, and it will initiate new activities as needed and supported by the SIGdial membership.

SIGdial now has two parent organisations, i.e. ACL and ISCA. People from the two communities of ACL and ISCA have often been working on discourse and dialogue from different perspectives and with different purposes. Bringing those people together in SIGdial is hoped to foster fruitful discussions and new activities, e.g. through task groups which are based on groups of people interested in the same SIGdial sub-area and wanting to promote and build new knowledge in this area through collaboration.

Also the general development in the area may inspire new activities. Discourse and dialogue is a central field not only for systems which merely use spoken or written natural language input/output but also for multimodal and natural interactive systems that have (spoken) natural language as one of the input/output modalities but in combination with other modalities such as e.g. input gesture. The interest in advanced unimodal as well as multimodal and natural interactive dialogue systems is increasing and so is the interest in advanced discourse and dialogue processing techniques that can support the development of those systems. SIGdial activities are intended to respond to those trends.

7. References

- [1] SIGdial web: <http://www.sigdial.org>
- [2] ACL web: <http://www.cs.columbia.edu/~acl/home.html>
- [3] ISCA web: <http://www.isca-speech.org>