Computer Aided Network DEsign Committee (CANDE)

A Technical Committee of the IEEE Circuits and Systems Society

The first CANDE Workshop, held in 1972, was organized by Steve Director who sought to gather some of the best minds in the rapidly emerging CAD industry in an open workshop atmosphere. The participants discussed their work in progress and the challenges facing the industry. Steve's efforts were so successful that CANDE was born as a committee of the IEEE Circuits and Systems Society.

A CANDE workshop is organized to promote very open discussion among the participants. No proceedings are published and no recording of the sessions is allowed. In addition to the successes of work in progress, the attendees hear of work that did not succeed as expected. Time is provided for a full discussion (often quite lively) of the topics of interest. The attendance at the workshops is limited to 50 – 60 so that everyone can participate in the discussion. The format is one of a few short talks followed by plenty of time for full discussion. In some cases, all of the planned presentations could not be given due to prolonged discussion of solution proposals. Occasionally, CANDE will request a tutorial in an emerging area of research for the industry. Because there are no publications directly from CANDE, new members have usually been introduced by those already familiar with the committee and its workshop.

The CANDE Workshops are held in locations that are conducive to a relaxed atmosphere where colleagues can enjoy the setting while exploring their latest technical challenges without interruptions. CANDE has been held in locations from Montreal, Canada to Cabo San Lucas, Mexico. At this point, CANDE has not returned to any location at which a workshop was previously held. A return to Montreal may be in the offing to celebrate thirty years of CANDE.

Over the years, CANDE has covered significant new ideas in electronic design automation research and practice. Prominent among these were MOTIS and Synthesis technologies that were first discussed at CANDE before being developed to the point that publication was possible. ICCAD was conceived at CANDE and brought forward by Bill McCalla to be internationally recognized as a premier conference in the EDA industry. Every five years, a session of the workshop is devoted to developing predictions for the next five years. But it is not the presentations at CANDE that are of the most value. The interactions between the attendees themselves form the greatest contributions. CANDE has been populated by many great luminaries from the EDA industry: Don Pederson, Richard Newton, Herman Gummel, Aart DeGeus, Gabor Temes, Ian Getreu, Bill McCalla, Peter Verhofstadt, Takehide Inoue, Ron Rohrer, Steve Director, Andrzej Strowas... are names well recognized in the industry. These people have shared their experience and vision with the attendees in the informal setting of the workshop. While the technical presentations are very valuable, it is the rich experience and knowledge of the workshop attendees that has always proved to be the most valuable aspect of CANDE. Certainly, there is no other meeting of any kind that provides this kind of interchange with such notables of the industry in a close, personal atmosphere.

Planning for the CANDE Workshop is conducted at short, regular meetings held at DAC and ICCAD each year. The hottest topics of the time are proposed for discussion. These topics cover subjects both in the industry and in closely related fields. From the many topics that are suggested, three or four will be selected for developing a discussion session. As mentioned above, CANDE will occasionally choose to hear a tutorial on a new or closely related technology. CANDE has also been known to have a session on a support topic that is non-technical but still vital to the industry. In addition to the traditional topics of simulation, modeling, macro-modeling, high level description languages, synthesis, place and route, verification, etc., CANDE has had discussions on MEMS, multi-chip modules, impact of the internet on EDA, ultra-low power design and battery technology. CANDE has even looked at the world of venture capital as it has participated in the EDA industry. The most recent CANDE discussed the topics of system level description languages, intellectual property in the SoC era, and designing for ultra-low power.

For more information on CANDE, please check http://www.cande.net/.