

Foreword

Blocks and Beyond, 2015

Welcome to the 2015 IEEE Blocks and Beyond Workshop (B&B)!

Recently, there has been an explosion of interest in blocks programming languages and related visual programming environments, such as Scratch, Blockly, App Inventor, Snap!, Pencil Code, Alice/Looking Glass, Greenfoot, TouchDevelop, and AgentSheets/AgentCubes. Code.org’s Hour of Code and blocks-based curricular activities have played a huge role in increasing the popularity of blocks languages. These environments have introduced programming and computational thinking to tens of millions, reaching people of all ages and backgrounds.

Despite their popularity, there has been remarkably little research on the usability, effectiveness, or generalizability of affordances from these environments. This workshop brings together educators, researchers, and developers with experience in blocks languages with the goal of beginning to distill testable hypotheses from the existing folk knowledge of blocks-based programming environments and to identify research questions and partnerships that can legitimize, or discount, pieces of this knowledge.

We are delighted that this workshop is being held in conjunction with VL/HCC 2015 in Atlanta. This raises the profile of blocks languages and encourages cross-fertilization between blocks language researchers and the broader VL/HCC community.

When we first started planning this workshop, we imagined an intimate gathering of about 15 to 20 people. So, we were astonished by the overwhelming response to our workshop. We received 52 submissions, underscoring a large untapped interest in blocks languages.

Submissions were invited in two categories: position statements (1 to 3 pages describing an idea, research question, or work related to the design, teaching, or study of blocks programming languages) or papers (up to 6 pages describing previously unpublished work in the blocks language area). Of the 19 papers submitted, 14 (74%) were accepted. Of the 32 position statements submitted, 22 (69%) were accepted. (These statistics do not include a paper that was withdrawn when the authors realized they could not attend the workshop.) We thank our Program Committee members for reviewing many more submissions than we expected, and for doing so on a very short timeline during prime summer vacation weeks.

Between submission authors, members of the program and organizing committees, and other interested parties, we are expecting about 60 attendees at B&B. This large number raises many challenges for the workshop schedule. From the beginning, we wanted the workshop to emphasize discussion, and not just be a mini-conference in which papers are presented. But having discussions with 60 participants is not very fruitful. So we decided on a model in which we would have 6 presentation/discussion sessions scheduled in two tracks over three 1.5 hour time slots. Each such session will begin with about 30 minutes of presentations and will be followed by an hour of discussion. Having parallel tracks in a workshop is highly unusual, but we saw no other way to handle the large number of accepted submissions and preserve the discussion-oriented nature of the workshop. These sessions will be preceded by a 1.5 hour demo/poster session in which any attendee can present a poster or give a demo on a blocks language topic. At the end of the day, there will

be a wrap-up session summarizing the discussions of the 6 presentation/discussion sessions and planning for the future.

To further take advantage of having so many people interested in blocks languages together in one place, we have allocated the day after the workshop to informal meetings and discussions for interested attendees. Nearly two-thirds of the expected attendees have indicated that they want to participate in these post-workshop discussions.

We owe special thanks to the VL/HCC 2015 organizers for all their hard work in helping to make B&B a success. Scott Fleming gave us much help and encouragement in the planning and organization of this workshop. Eileen Kraemer did an extraordinary job finding additional space and hotel rooms when the number of expected attendees tripled. Jane Li provided valuable advice and flexibility in the preparation of the proceedings.

Most of all, we would like to thank everyone who submitted to and/or will be attending the B&B workshop in Atlanta. We are all looking forward to the conversations that will take place and the ideas that will emerge when so many blocks language enthusiasts are together in one place.

Sincerely,

The Blocks and Beyond Organizing Committee:

Franklyn Turbak (chair)

David Bau

Jeff Gray

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