

ICCBR 2019 Doctoral Consortium

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Preface

This year marks the eleventh anniversary of the ICCBR Doctoral Consortium (DC). The DC was designed to nurture PhD candidates by providing them with opportunities to obtain feedback on their research, future work plans, and career objectives from senior case-based reasoning (CBR) researchers and practitioners. We are proud to carry on the tradition with a cohort of ten doctoral students from seven different countries.

PhD candidates who applied to the program submitted summaries of their doctoral research. In their research summaries, they detailed the problems they are addressing, outlined their proposed research plans, and described progress to date. Accepted applicants were paired with mentors who helped them to refine their research summaries in light of reviewer feedback. The updated research summaries, which appear in this volume, were then orally presented at the ICCBR DC on September 8-9, 2019 in Otzenhausen, Germany.

This year's participants presented a broad array of ongoing CBR research. Deepika Verma discussed the use of CBR to improve the classification of physical activities from body-worn sensor data. Glenn Forbes studied the monitoring of health conditions from sensors in Smart Homes. Christian Zeyen presented his work on interactive assistance for scientific workflow modeling. Christopher L. Bartlett explained his research on using prototypes to classify novel cases in microarray analysis. Anbarasu Sekar discussed how to exploit relationships among cases and the user's feedback in conversational case-based recommender systems. Brian Schack presented three case base maintenance strategies beyond case deletion to improve the performance of CBR systems. Jérôme Cerutti studied the problem of identifying and implementing actions to protect drinking water sources based on past experiences. Venkatsampath Raja Gogineni described the creation of autonomous explainable agents using case-based explanations, behavior adaptation, and casual understanding. Jakob Michael Schoenborn studied different types of explanations used in explainable AI and how to select the best one for a particular user. Finally, Diana Sofia Lora Ariza presented her work on dynamically adapting the difficulty of a game to improve the player's game experience.

We gratefully acknowledge support from the National Science Foundation and the Artificial Intelligence Journal, which helped to defray the cost of student participation in the DC. We also thank all of the students, mentors, and program committee members who worked so hard to make the DC a success.

Students and *Mentors*

Christopher L. Bartlett <i>Mirjam Minor</i>	State University of New York at Oswego, USA <i>Goethe University Frankfurt, Germany</i>
Jérôme Cerutti <i>Klaus-Dieter Althoff</i>	Laval University, Canada <i>University of Hildesheim / DFKI, Germany</i>
Glenn Forbes <i>Barry Smyth</i>	Robert Gordon University, UK <i>University College Dublin, Ireland</i>
Diana Sofia Lora Ariza <i>Michael W. Floyd</i>	Universidad Complutense de Madrid, Spain <i>Knexus Research Corporation, USA</i>
Venkatsampath Raja Gogineni <i>David W. Aha</i>	Wright State University, USA <i>Naval Research Laboratory, USA</i>
Brian Schack <i>Isabelle Bichindaritz</i>	Indiana University, USA <i>State University of New York at Oswego, USA</i>
Jakob Michael Schoenborn <i>David B. Leake</i>	University of Hildesheim Germany <i>Indiana University, USA</i>
Anbarasu Sekar <i>Jean Lieber</i>	Indian Institute of Technology Madras, India <i>LORIA, France</i>
Deepika Verma <i>Anders Kofod-Petersen</i>	NTNU, Norway <i>NTNU, Norway</i>
Christian Zeyen <i>Antonio A. Sánchez-Ruiz</i>	University of Trier, Germany <i>Universidad Complutense de Madrid, Spain</i>

Program Chairs

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Program Committee

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