

Preface

Artificial intelligence (AI) researchers continue to face large challenges in their quest to develop truly intelligent systems. The recent developments in the area of neural-symbolic integration bring an opportunity to combine symbolic AI with robust neural computation to tackle some of these challenges. The workshop series on Neural-Symbolic Learning and Reasoning is intended to create an atmosphere of exchange of ideas, providing a forum for the presentation and discussion of the key topics relating to neural-symbolic integration. Topics of interest at the workshop include the representation of symbolic knowledge by connectionist systems; integrated neural-symbolic learning approaches; extraction of symbolic knowledge from trained neural networks; integrated neural-symbolic reasoning; biologically-inspired neural-symbolic integration; integration of logic and probabilities in neural networks; structured learning and relational learning in neural networks; applications in robotics, simulation, fraud prevention, semantic web, software engineering, fault diagnosis, bioinformatics, visual intelligence, and so on.

– *Artur d'Avila Garcez, Pascal Hitzler, Luis C. Lamb*
Cochairs