

**Subject:** UNO IS&T Research Seminar Series – Dr. Torsten Schaub  
**Location:** PKI 158  
**Organizer:** rgandhi@unomaha.edu  
**Start time:** Thursday, October 10, 2024 at 3:00 PM  
**End time:** Thursday, October 10, 2024 at 4:00 PM

## UNO IS&T Research Seminar Series

Speaker:

Dr. Torsten Schaub

University of Potsdam

<https://www.cs.uni-potsdam.de/~torsten/>

Dr. Torsten Schaub is a University Professor for Knowledge Processing and Information Systems at the University of Potsdam, Germany. He is a fellow of the European Association for Artificial Intelligence EurAI. Dr. Schaub research has lead projects in the use of Declarative Programming methods in Artificial Intelligence. His push for bringing these methods to industrial use has lead him to develop the tool answer set solver clingo and founding Potassco Solutions GmbH, of which he is managing and scientific director.

Title of the talk: Answer Set Programming in Industry, Here-and-There

Abstract:

Answer Set Programming (ASP) has become a popular paradigm for declarative problem solving and is about to find its way into industry. This is due to its expressive yet easy knowledge representation language powered by highly performant (Boolean) solving technology. As with many other such paradigms before, the transition from academia to industry calls for more versatility. Hence, many real-world applications are not tackled by pure ASP but rather hybrid ASP. The corresponding ASP systems are usually augmented by foreign language constructs from which additional inferences can be drawn. Examples include linear equations or temporal formulas. For the design of "sound" systems, however, it is indispensable to provide semantic underpinnings right from the start. To this end, we will discuss the vital role of ASP's logical foundations, the logic of Here-and-There and its non-monotonic extension, Equilibrium Logic, in designing hybrid ASP systems and highlight some of the resulting industrial applications.

Wednesday, October 10th, 3:00pm - 4:00pm

Room PKI 158

Contact:

Jorge Fandinno Garcia [jfandinno@unomaha.edu](mailto:jfandinno@unomaha.edu)