Seminar/Talk

Learning Nominal Automata

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Automata learning, or regular inference, is a widely used technique for creating an automaton model from observations. In recent years, it has been successfully applied to the verification of security protocols, hardware, and software systems. The original algorithm L* works for deterministic finite automata, and is only capable of learning control-flow models.

In this talk I will present an extension of L* to learn combined control/data-flow models in the form of nominal automata, which are acceptors of languages over infinite (structured) alphabets. After recalling L*, I will briefly present the theory of nominal sets. Then I will show how this theory enables extending L* to infinite alphabets in a seamless way, with almost no modifications to the original code. Finally, I will give a short demo of a tool based on this work, currently being developed at UCL.

Wednesday, May 10, 2017 05:00pm - 06:00pm
Mondi Seminar Room 3, Central Building

This invitation is valid as a ticket for the ISTA Shuttle from and to Heiligenstadt Station. Please find a schedule of the ISTA Shuttle on our webpage: https://ista.ac.at/en/campus/how-to-get-here/ The ISTA Shuttle bus is marked ISTA Shuttle (#142) and has the Institute Logo printed on the side.