

# Static analysis of programs with singly-linked lists

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Where: Jakob-Haringer-Str. 2, Room T02

When: Monday, July 14, 2014 - 14:00 h s.t.

Dynamically allocated data structures are heavily used in software nowadays, to organize and facilitate the access to data. This poses new challenges to software verification, due to various aspects, either related to the control structure or to the data. In this talk we present static analyses, that can automatically synthesize invariants and procedure summaries. Classically, static analysis has been used to prove correctness of non-functional properties, such as null pointer dereference. In this talk, we present static analyses, that can prove complex functional properties describing the values stored in the data structure.

*Cezara Drăgoi is a post-doc in IST Austria Tom Henzinger group. She got her phd in LIAFA (University Paris 7) under the supervision of Ahmed Bouajjani and Mihaela Sighireanu. Her main research interests are in software verification and analysis . She has a computer science bachelor degree obtained at the University of Bucharest. Last but not least this is her home town.*



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