Research Interests

- equational theorem proving:
  reasoning guided by SMT solver (tool maedmax)
- program analysis via term rewriting:
  nontermination and completion for LCTRSs
- formalization of theorem proving and rewriting in Isabelle

Talk: Loop Detection by Logically Constrained Rewriting

1. term rewriting with SMT side conditions
2. criteria to find loops
3. can detect nontermination in variety of applications:
   C programs, integer transition systems, LLVM simplifications, ...