iProver v3.5 (Konstantin Korovin, André Duarte, Edvard K. Holden)

iProver supports all combinations of: quantifiers, uninterpreted functions, data types, linear and non-linear arithmetic.

- Quantified reasoning: model-guided Inst-Gen + superposition + resolution calculi.
  - Saturation algorithm: priority queues, discrimination trees, feature vector indexing.
  - Simplifications: forward/backward: demodulation, light normalisation, subsumption, global subsumption and subsumption resolution, AC ground joinability, AC normalisaion.
  - Preprocessing: predicate elimination, splitting, semantic filtering, subtyping and definition elimination.
- Ground reasoning: MiniSAT, Z3
- Clausification and Theory Axioms: Vampire
- Heuristic optimisation and scheduling using machine learning: HOS-ML

iProver is implemented in OCaml. https://www.cs.man.ac.uk/~korovink/iprover