Labeling-Heuristiken

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Algorithm Engineering - Projekt

SAN

- TODO

Rules-Heuristik

- Phase I: Anwenden der Regeln auf alle Punkte
- Phase II: Heuristisches Eliminieren von Kandidaten

- Ein *Punkt* hat mehrere *Kandidaten*
- Kandidaten können *in Konflikt stehen*
- Die *Konflikt-Partner* eines Kandidaten sind alle Kandidaten, mit denen er in Konflikt steht
- *Konfliktzahl* eines Kandidaten: Anzahl der Konflikt-Partner

Rules-Heuristik

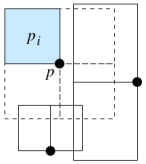


Figure 3.12: Rule **L1**

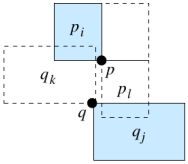


Figure 3.13: Rule **L2**

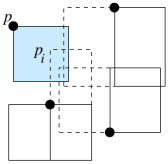


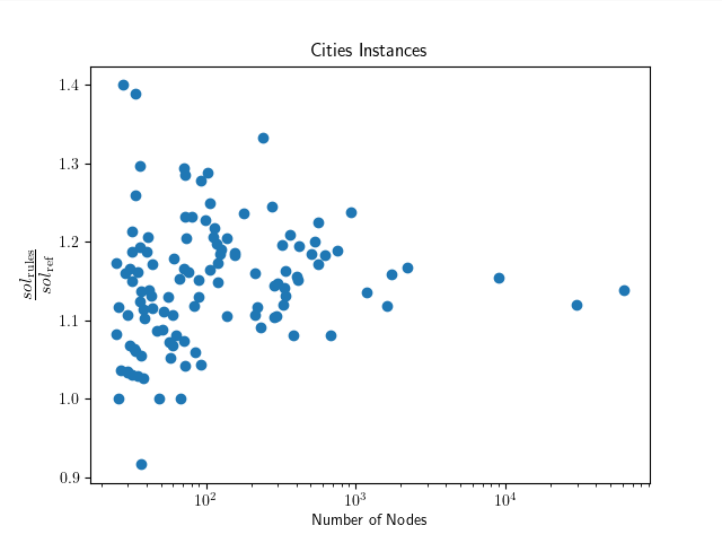
Figure 3.14: Rule **L3**

(L1) If p has a candidate p_i without any conflicts, declare p_i to be part of the solution, and eliminate all other candidates of p, see Figure 3.12.

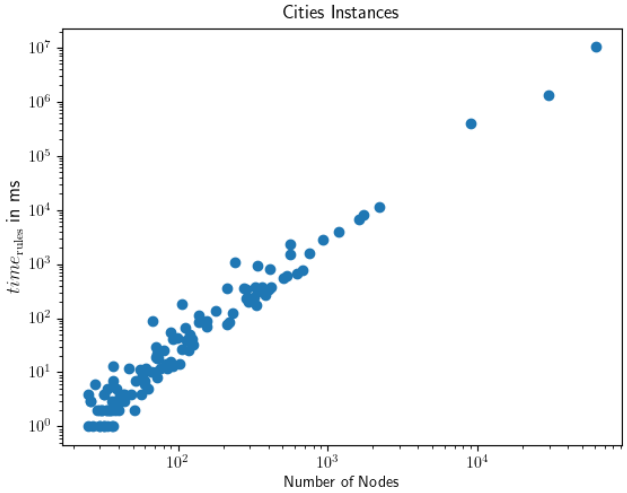
(L2) If p has a candidate p_i that is only in conflict with some q_k, and q has a candidate q_j ($j \neq k$) that is only overlapped by p_l ($l \neq i$), then add p_i and q_j to the solution and eliminate all other candidates of p and q, see Figure 3.13.

(L3) If p has only one candidate p_i left, and the candidates overlapping p_i form a clique, then declare p_i to be part of the solution and eliminate all candidates that overlap p_i, see Figure 3.14.

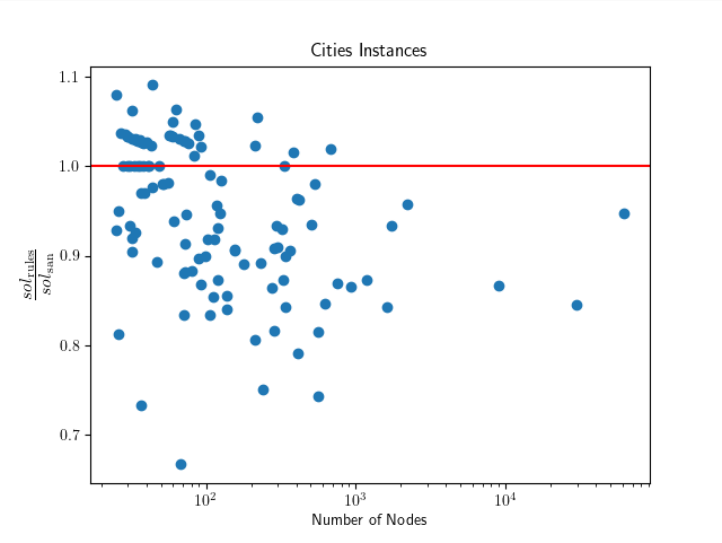
Rules-Heuristik: Ergebnisse



Rules-Heuristik: Laufzeit



Rules-Heuristik: Vergleich mit SAN



Rules-Heuristik: Vergleich mit SAN: Laufzeit