SimSun

Anchor Subgraph Expansion

1

- XX G_t
- f_{struct}
-

2

- $X = \{p_1, p_2, ..., p_m\}$ G_X
- **motif** $\mathcal{M} = \{m_1, m_2, ..., m_d\}$
- G motif

$$f_{\text{struct}}(G) = W \cdot \text{motif\_counts}(G, \mathcal{M}) \in \mathbb{R}^d$$

3

- G_X motif $\mathcal{M}$

$$\text{motif\_counts}(G_X, \mathcal{M}) = [c_1, c_2, ..., c_d]$$

-

$$f_{\text{struct}}(X) := f_{\text{struct}}(G_X)$$

- “”

4 Anchor Predicate Expansion —

4.1

- $p_i \in X$ (h, p_i, t)
- $G_0 = \{(h, p_i, t)\}$ $f_{\text{struct}}(G_0)$

4.2

G_t G_t e

- $G_{t+1} = G_t \cup \{e\}$ $f_{\text{struct}}(G_{t+1})$
- L2

$$\Delta = \|f_{\text{struct}}(G_t) - f_{\text{struct}}(X)\|_2 - \|f_{\text{struct}}(G_{t+1}) - f_{\text{struct}}(X)\|_2$$

-
  - $\Delta \geq \tau$
  -

4.3

- X $X \subseteq \text{predicates}(G_t)$
- $$\|f_{\text{struct}}(G_t) - f_{\text{struct}}(X)\|_2 \leq \epsilon$$
-

5

- X $X' \neq X$
- X' Anchor Predicate Expansion

6

- f_{struct} f
-

7

- f_{struct}
-
-

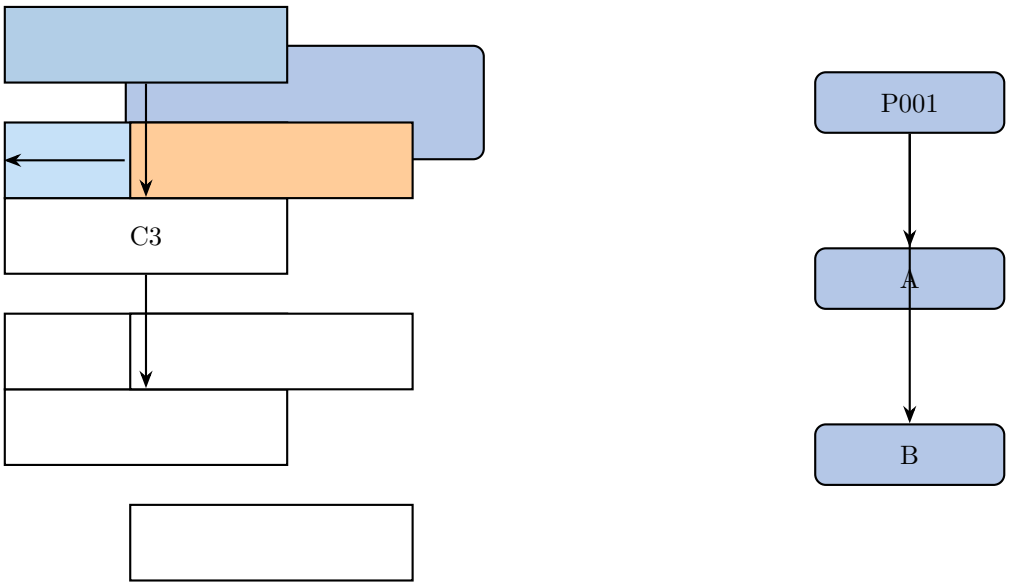

Figure 1: